



FIG. 62.—CENTRAL GARDENS, THE LINDENBURG HOSPITAL, COLOGNE.

### MODERN GERMAN HOSPITAL CONSTRUCTION.—III.

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(Continued from p. 108.)

#### ELECTRICAL AND LIGHT DEPARTMENTS.

THE important parts which the Röntgen Rays, the Finsen Light, and electricity play in the modern treatment of skin and other diseases render the very complete departments found in the German hospitals of great interest. At St. Georg Hamburg and Cologne Lindenburg the light department is placed on the first floor of the operation house. At Hamburg Eppendorf it is a detached block connected to the clinical lecture theatre, at Nuremberg it is connected to the bath house, at the Virchow Berlin it is a detached block in the centre of the hospital, at Düsseldorf it is situated between the pavilions for male and female skin and venereal diseases, and at the Royal Charité, Berlin, it is situated on the upper floors of the out-patients' department for skin and venereal diseases. The accommodation of these institutions usually comprises separate waiting-rooms for men and women, Röntgen rooms for treatment, examination, and photography, Finsen Light treatment rooms, dark-rooms, and laboratories, and the equipment is always very fine and complete.

#### BATH-HOUSES.

The bathing department is looked upon in Germany as of the greatest importance, and the bath-houses or blocks in which the baths are contained are perhaps without parallel in the English hospitals. Generally speaking, they are situated in the centre of the medical department, between the men's and women's sides, and bear the same relation to that

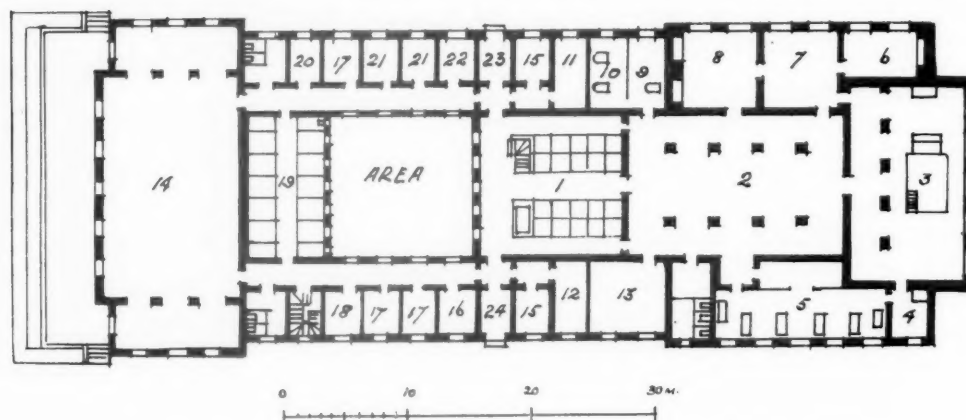


FIG. 42.—GROUND FLOOR PLAN OF THE BATH-HOUSE, THE VIRCHOW HOSPITAL, BERLIN.

1. Undressing Room. 2. Cooling Room. 3. Hydropathic Room. 4. Steam Cabinet Bath. 5. Sand Baths. 6, 7. Turkish Baths. 8. Steam Bath. 9. Electrical Baths. 10. Mineral Water Baths. 11. Electrical Treatment. 12, 13. Inhalatoria. 14. Medical Gymnasium. 15. Bath Linen. 16. Apparatus. 17. Staff. 18. Examination. 19. Staff Baths. 20. Medical Officer. 21. Head Sister. 22. Dining Room. 23. Men's Entrance. 24. Women's Entrance.



FIG. 43.—CENTRAL COOLING ROOM, THE VIRCHOW HOSPITAL, BERLIN.

department as does the operation house to the surgical department. The baths are not in duplicate for the sexes, but men and women attend at different times. At the Eppendorf and St. Georg Hospitals Hamburg, Nuremberg, Dresden, and the Virchow Berlin, the traffic to and from the bath-house takes place in the open; at Charlottenburg, Cologne Lindenburg, and Munich III., through closed corridors, and at Düsseldorf through a subway.

The finest bath-house in Germany, with the exception, perhaps, of that at Beelitz-i.-Mark, is found at the Virchow Hospital, Berlin [fig. 42], and is a detached block situated in the centre of the medical department, it being as remarkable for its architectural treatment as for its complete equipment. The entrances for men and women are on opposite sides, adjoining the linen rooms, where they receive the bathing linen, and then pass into the undressing room which contains twenty undressing boxes. In this room is a stair and a bed-lift to the sun-bath on the flat roof. The central cooling and massage-room

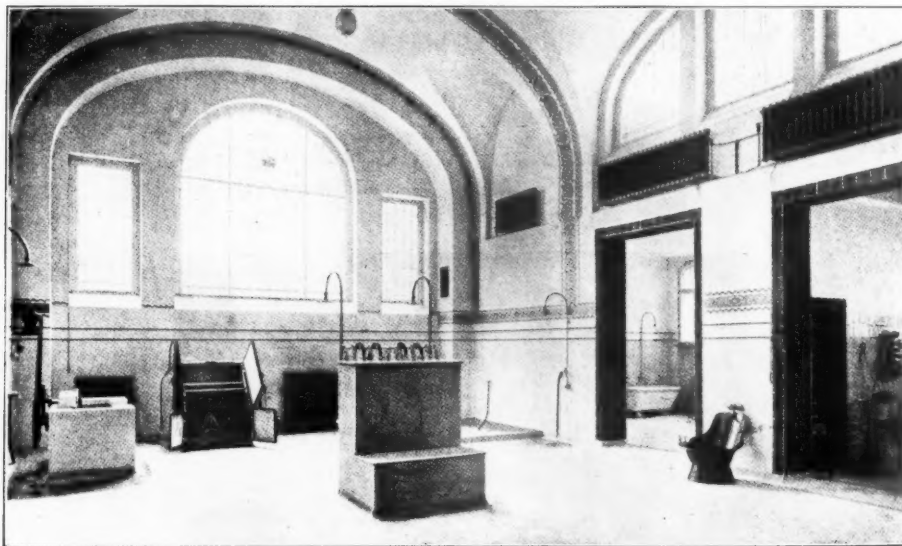


FIG. 44.—THE BATH-HOUSE, DÜSSELDORF GENERAL HOSPITAL.

[fig. 43] is entered directly from the undressing room, and is designed on the lines of a basilica, with central vaulted and clerestory-lighted nave and side aisles. Opening from this room are the various bath-rooms for hydropathic treatment, sand baths, carbonic acid gas baths, Turkish and Russian baths, etc. On the side wings are rooms for electrical treatment and inhalation, doctors', nurses', and attendants' rooms, while at the opposite side of the area are staff baths, and facing on to the central avenue the large medical gymnasium, with a terrace to the front for exercises in the open.

As a rule the cooling-rooms are the centre of the bath-house, the various bath-rooms opening from them, as at Düsseldorf [fig. 44] or Charlottenburg. The hydropathic rooms are usually equipped with a variety of sprays, douches, jets, and waves, which are controlled by the attendant from a special platform, various spray and sitz-baths, and usually a cold-water plunge-bath. The carbonic acid gas baths [fig. 45] are mineral-water baths produced by mixing the water and carbonic acid gas under pressure in a cylinder; the hydro-electric baths are either complete, in which the current passes through a plunge-bath, or partial, in

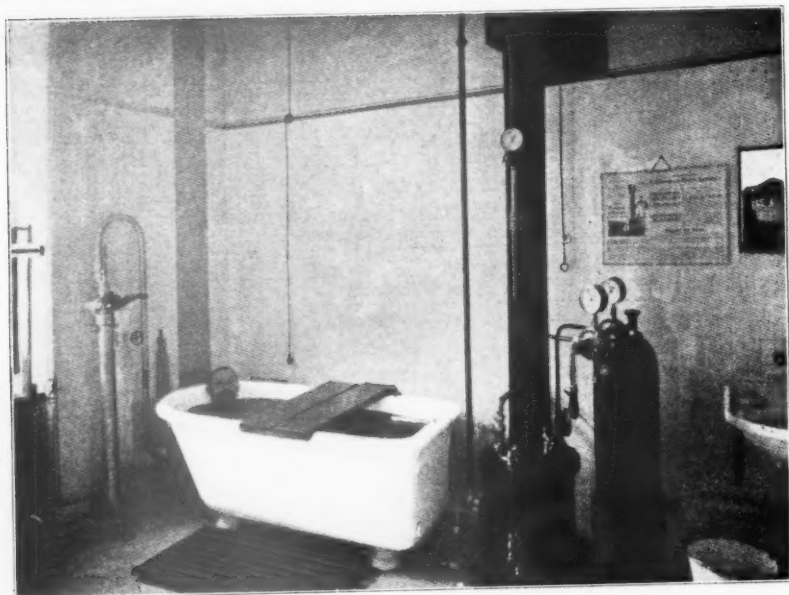


FIG. 45.—MINERAL WATER BATHS, HAMBURG ST. GEORG.



FIG. 46.—SAND BATHS, HAMBURG ST. GEORG.



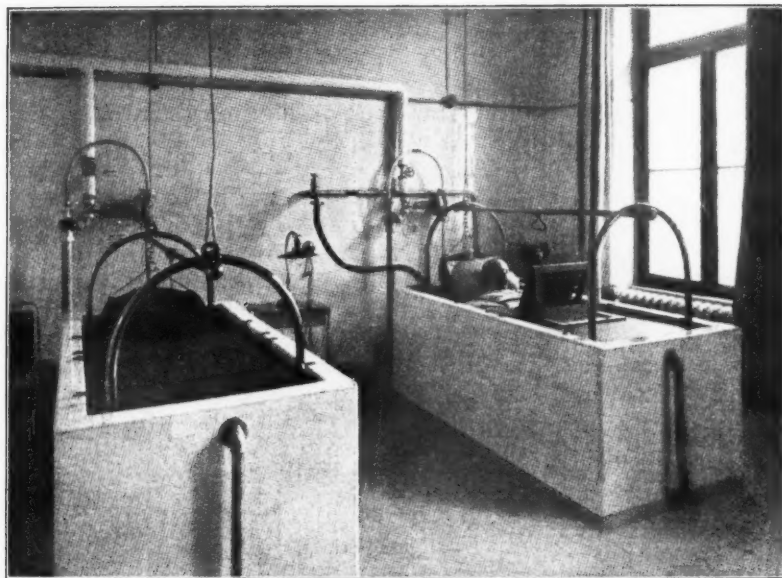


FIG. 47.—PERMANENT BATHS, HAMBURG ST. GEORG.

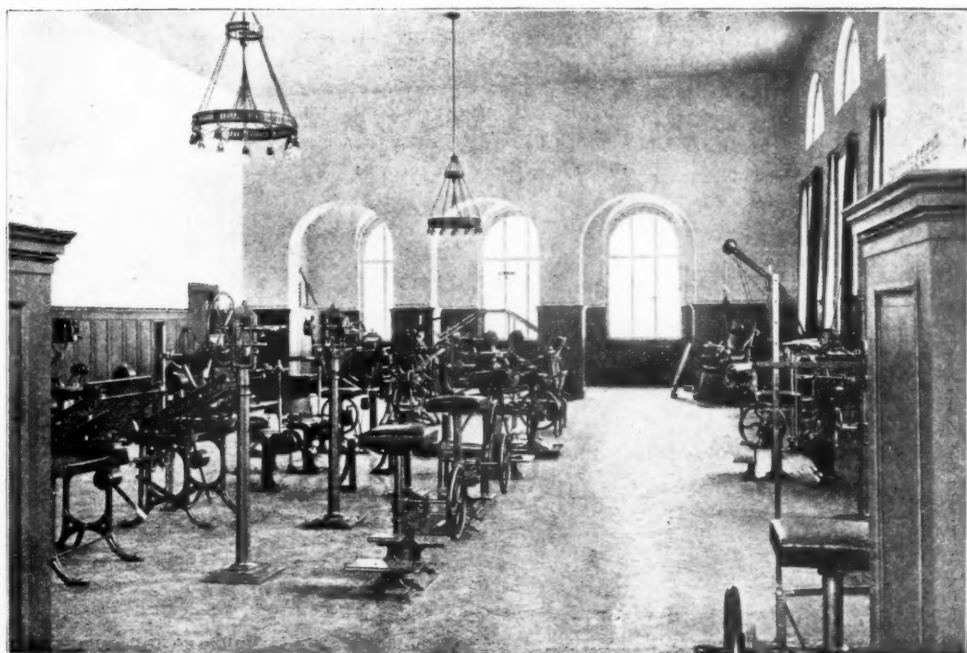


FIG. 48.—MEDICAL GYMNASIUM, THE VIRCHOW HOSPITAL, BERLIN.

which only one or more of the limbs are treated in a small bath. The sand baths [fig. 46] are employed for the application of dry heat, the apparatus comprising a cylinder for heating the sand, wood baths on wheels so as to convey the patient into the open, plunge-baths for use after the bath, and sand stores with apparatus for washing and disinfecting the sand. The Turkish baths comprise the various hot rooms, and are usually *en suite* with the Russian or steam baths. Among the other baths are electric light baths, peat baths, and cabinet baths for steam and hot air. The inhalatoria for chest complaints contain apparatus either for single or for common use.

The water-beds [fig. 47] for permanent baths are of particular interest, every hospital possessing at least one, and they are of great value for such cases as burns and typhoid. They consist of large built baths, in which the patient, who can be wholly immersed, lies on a sail-cloth bearer on a metal frame, which can be lowered or raised, while the flow of water

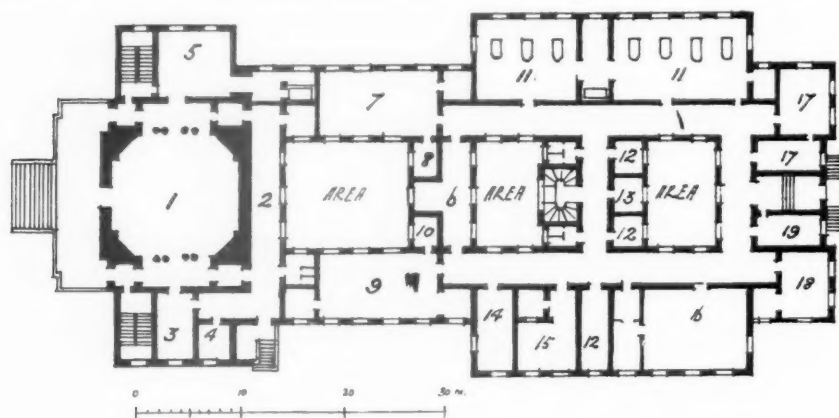


FIG. 49.—GROUND FLOOR PLAN OF THE PATHOLOGIC-ANATOMICAL INSTITUTE, THE VIRCHOW HOSPITAL, BERLIN.

1, Mortuary Chapel. 2, Friends' Waiting Room. 3, Priest. 4, Attendant. 5, Viewing Room. 6, Preparation Room. 7, Histology. 8, Scullery. 9, Bacteriology. 10, Incubators. 11, Dissecting Room. 12, Balance Room. 13, Office. 14, Incubator Room. 15, Photographic Room. 16, Chemical Laboratory. 17, Prosecutor. 18, Medical Officer's Duty Room. 19, Attendant.

at a constant temperature is automatically regulated. At the Virchow Hospital there is one of these baths in every alternate large ward, in some of the other hospitals, as Munich III., they are contained in single wards, while at Hamburg Eppendorf and St. Georg permanent bath departments with wards for three, two, and one bed are found in the bath-house.

The medical gymnasia [fig. 48] are always most complete, and are employed for what are termed medical or curative gymnastics. They contain a large amount of apparatus, a portion being worked by electric motors, for producing active and passive movements, mechanical massage, and vibration. As a rule, attached to the medical gymnasia, are other rooms for drill or Swedish exercises, the treatment of lateral curvature of the spine, and work-rooms for such work as wood-chopping or sand-shovelling. Fine examples of medical gymnasia are found at the Virchow Berlin, Eppendorf, Beelitz-i.-Mark, and Düsseldorf.

#### PATHOLOGICAL, ANATOMICAL, AND MORTUARY BLOCKS, AND MEDICAL SCHOOLS.

The very great attention paid in Germany to medical education and the investigation of diseases renders the pathological, anatomical, and mortuary blocks of great importance, every

hospital possessing a large block for these purposes, which comprises, in addition to the mortuary and adjoining rooms, dissecting rooms and laboratories for research work, a museum, and, in some cases, class-rooms. Attached to these blocks as a rule are the mortuary chapels and rooms for mourners, in which the funeral services are conducted, and whenever possible this series of rooms has separate access, and is kept distinct from the scientific portion of the building.

One of the finest examples is found at the Virchow Hospital, Berlin [fig. 49], consisting of a large detached block, situated at the head of the central avenue, and with direct access to the adjoining street through an avenue planted with weeping willows. The mortuaries and adjoining rooms are situated in the basement, and the scientific rooms on the ground floor, with the chapel and mourners' rooms to the rear. The mortuary slabs here are of terrazzo, the dissecting tables are of Solenhofer limestone, the floors and dados throughout are tiled, and the fittings to the laboratories are of glass and iron construction. The mortuary chapel [fig. 50], like the majority of these apartments, is particularly fine in its internal treatment. A detached block some little distance from



FIG. 50.—MORTUARY CHAPEL, THE VIRCHOW HOSPITAL, BERLIN.

the institute contains the animals for experimental purposes; stalls for the larger animals, cages for the smaller, and a loft for birds, being provided. A special autopsy block is attached to the infectious diseases department for the investigation of infectious diseases, and contains special rooms for work with cholera, plague, and other of the rarer infectious diseases.

Other fine examples of these blocks are found at Hamburg Eppendorf and St. Georg, Nuremberg, Dresden, Schöneberg, and Charlottenburg West End.

At the Frankfurt City Hospital there is a very fine Anatomical Institute, founded by the Senckenberg bequests, with lecture theatres and adjoining rooms, and in the two Academies

of Medicine at Düsseldorf and Cologne respectively one finds very complete pathological institutes fully equipped with laboratories and lecture theatres, for post-graduate courses and research work. A portion of the block at Düsseldorf forms the finely equipped Institute of Experimental Therapy, while at Cologne Lindenburg a point of interest is that the mortuary chapel and mourners' rooms are in an entirely separate block well away from the pathological institute, communication between the two being by a subway, as is the mortuary traffic throughout the hospital. At Dresden Johannstadt, too, the mortuary traffic takes place in subways, the bed-lifts descending to the basement for this purpose.

In the Royal Charité Hospital attached to the University of Berlin the pathological institute is said to be the finest in the world, the autopsies per year numbering over two thousand. It consists of three large blocks connected together by closed corridors. The main block is

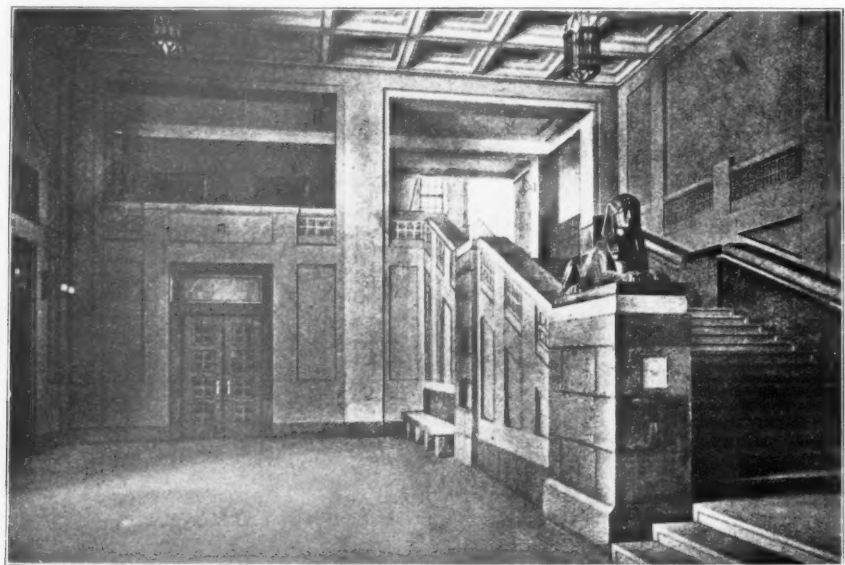


FIG. 51.—ENTRANCE HALL, THE ROYAL ANATOMICAL INSTITUTE, MUNICH.

of three stories, and contains the scientific rooms, laboratories, and research rooms; the autopsy block is again of three stories, and contains the mortuaries, etc., in the basement, with the chapel and mourners' rooms adjoining, and the dissecting rooms and clinical lecture theatres on the upper floors; while the third block of five stories is the museum, and contains the unique collection of specimens accumulated by the celebrated pathologist, Rudolf Virchow. A detached animal stable for the experimental animals completes the institute.

The new Anatomical Institute at Munich [fig. 51] which forms part of the University is a detached block situated in the clinical quarter of the city, and is largely of reinforced concrete construction. On the ground floor is the fine entrance hall with staircase, the public museum of anatomical specimens etc., on the first floor the large dissecting hall, semi-circular in shape, in which five hundred students can work at the same time, the large lecture theatre with accommodation for about three hundred, and adjoining rooms, and on the upper floors the microscopical and research rooms, and laboratories.

## RESIDENTIAL BLOCKS.

The directors as a rule have special houses provided for them in the hospitals, as at the Virchow Berlin, Nuremberg, and Munich III., while the resident officials either have special houses or else apartments in the administrative block.

Some of the doctors usually reside in their pavilion, generally on an upper floor, while the remainder have their apartments in the administrative block, or in a doctors' home as at the Virchow.

The quarters for nurses differ in the various hospitals. As a rule a proportion of the nurses sleep in their pavilion, in the older type, as Hamburg Eppendorf and Nuremberg, on the same floor as the patients, and in the more recent, as the Virchow or Charlottenburg West End, on an upper floor. The nurses' home itself is often contained on the upper floors of the housekeeping block, as at Nuremberg, Dresden, or Düsseldorf, but detached homes are as often found, as at the Virchow, Cologne, Charlottenburg, or Munich III.

The domestic staff have their apartments as a rule close to their work, the kitchen staff in the kitchen block, laundry maids in the laundry block, ward maids in the pavilions, and female staff generally on the upper floors of the nurses' home or administrative blocks.

The technical staff, as engineers and electricians, reside close to their work, and lodges are provided for the porters.

## DOMESTIC BLOCKS.

The domestic or economic blocks comprise the kitchens, laundries, and stores, and are kept entirely separate and detached from the administrative offices and the patients' quarters, yet at the same time as central as possible for service. They are usually grouped with the technical blocks with separate access for tradesmen, good examples of this grouping being found at Hamburg Eppendorf and the Virchow Hospital, Berlin.

As a rule the food service from the kitchens to the pavilions takes place through the open in special dinner-wagons. At Dresden in wet weather the service is performed in the subways, while at Munich III., perhaps the most modern hospital, the kitchen block is connected up to the pavilions by closed corridors. The food wagons generally serve directly to the doors of the pavilions, and thence to the ward kitchens, but at Schöneberg the food is passed through a special opening below the sill of the ward kitchen window, and at Düsseldorf and Cologne the food is brought to an outside lift by which it is raised to the ward kitchens. In infectious diseases pavilions the service generally takes place through a special window.

A common arrangement is to place the kitchen and laundry in one block as at Nuremberg, Düsseldorf, or Dresden Maternity, known as the "Wirtschafts-Gebäude"

(housekeeping block), the kitchen being in one wing and the laundry in the other, while the nurses' and servants' homes and hospital stores are on the upper floors. In other hospitals, as at Charlottenburg West End, Munich III., Schöneberg, or the Virchow Berlin, the kitchens and laundries are in separate blocks.

The Virchow Hospital kitchen block [fig. 52] is perhaps a typical example of the

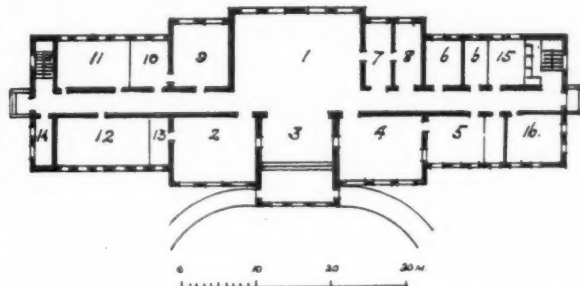


FIG. 52.—GROUND FLOOR PLAN OF THE KITCHEN BLOCK, THE VIRCHOW HOSPITAL, BERLIN.

- 1, Central Kitchen. 2, Roasting Kitchen. 3, Servery. 4, Scullery. 5, Crockery.
- 6, Pantry. 7, Housekeeper. 8, Milk Room. 9, Meat Preparing. 10, Meat Store.
- 11, Groceries. 12, Vegetable Scullery. 13, Roasting Utensils. 14, Steward.
- 15, Office. 16, Staff Dining Room.



German hospital kitchen. The main kitchen [fig. 53], placed in the centre of the ground floor, is 58 feet long by 44 feet wide, and rises through the two stories. All boiling is done by steam and roasting by gas, the equipment comprising 24 boiling-pans of various sizes with a total capacity of 2178 gallons, boiling and roasting hearths, etc. To the front of the kitchen is the servery to the food-wagon porch, and on either side the roasting and boiling kitchen, with 26 gas ovens, potato-steamers and grids, and the scullery, each of which is 36 feet long by 29 feet 6 in. wide and has rooms adjoining for roasting utensils and crockery respectively.



FIG. 53.—THE CENTRAL KITCHEN, THE VIRCHOW HOSPITAL, BERLIN.

The other rooms on the ground floor comprise the housekeepers' room, milk room and pantries, meat preparing room and pantries, large provision store, stewards' room, office, and staff dining-room.

In the basement are store rooms with refrigerating apparatus for vegetables, potatoes, meat, beer and wine, mineral water manufactory, and dining and bath-rooms for the male staff. On the first floor are the apartments for the head-cook, cook, and 36 kitchen-maids, and on the roof floor the apartments for 17 male kitchen staff. A detached block to one side contains the wagons for the food service. The floors generally are tiled and the dados glazed tiled, while special provision is made for exhausting steam.



The laundry block [fig. 54] at the Virchow Hospital is of similar form to the kitchen block and is a typical example of the German hospital laundry. The sterilised linen from the pavilions is brought to the covered porch at the eastern end of the block, and then taken into the receiving room, where it is sorted into the bins, which are constructed of reinforced concrete covered with white glazed tiles. Adjoining is the steeping room, containing 27 steeping troughs of similar construction to the sorting bins, three steam boiling-pans for the removal of any blood or pus spots from the linen, and boilers for the soap and soda solution, which is led from here to the washing machines.

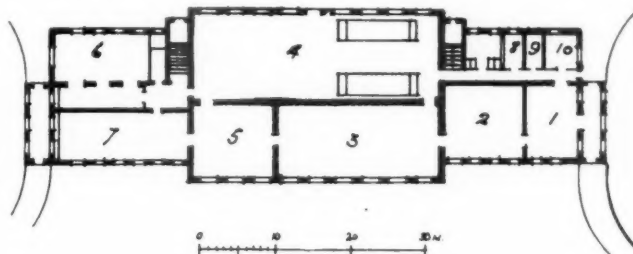


FIG. 54.—GROUND FLOOR PLAN OF THE LAUNDRY BLOCK, THE VIRCHOW HOSPITAL, BERLIN.

1. Receiving Room. 2. Steeping Room. 3. Wash House. 4. Drying Room. 5. Mangling Room. 6. Ironing. 7. Delivery Room. 8. Engineer. 9. Soap Store. 10. Office.

The linen then enters the wash-house, 70 feet 6 in. long by 31 feet wide and extending through the two stories. The machinery, which does not differ greatly from that employed in England, is all electrically driven, and comprises ten washing machines, each capable of

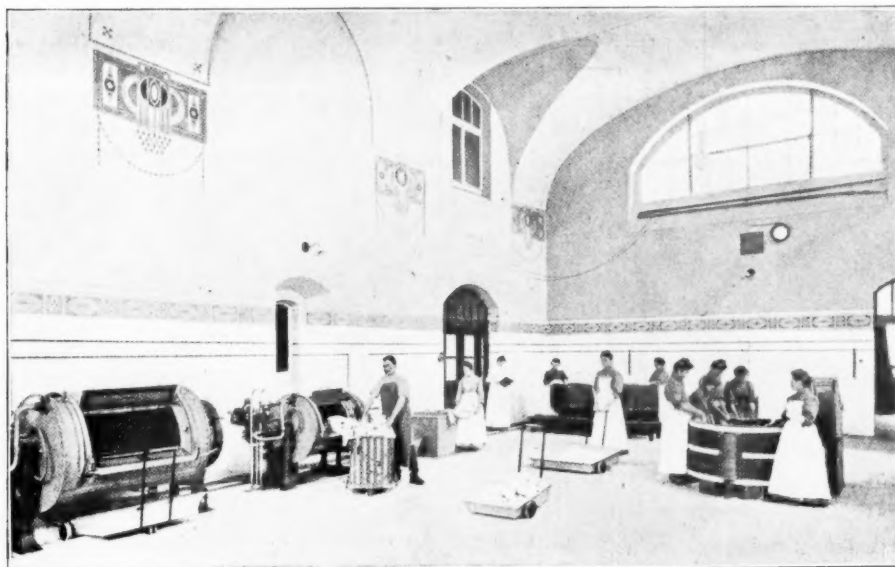


FIG. 55.—THE WASH HOUSE, DÜSSELDORF GENERAL HOSPITAL.

washing eleven stones of dry linen in 45 minutes, and six hydro-extractors making 800 revolutions per minute [see fig. 55].

The smooth bed and table linen passes next to the mangling room, where it is dried and ironed at the same time by two steam mangles.

The coloured, wool, and body linen comes into the drying room, to the "chain" drying apparatus, which is very largely employed in Germany, drying houses or drying compartments being uncommon. It consists of a closed wooden compartment some 30 feet long and 10 feet wide, which is steam heated, the hot air passing out through an extract duct at the top. The linen is hung at the entrance end of the apparatus on horizontal rods, which travel on a continuous chain in about an hour to the opposite end of the compartment, where the linen falls into a box, while the rods return on the lower segment of the moving chain to the entrance end. The linen is then mangled by three electrically driven machines, and folded on the special tables, whence it is taken to the ironing room which contains fifteen working places, or to the delivery room, which adjoins the porch to which the linen-wagons come to convey the clean linen to the pavilions.

The remaining ground floor rooms comprise an office, soap store, engineers' room, and a large dressing-room and lavatory for the laundry staff. On the first floor is a large needle room with twelve sewing machines, a reserve ironing-room, a dining-room with scullery for the laundry maids, large linen stores, and apartments for the head-laundress and nine laundry maids, whilst on the roof floor accommodation is provided for 24 more maids. A large turf

stretch to the north of the block is used as a bleaching ground for the linen, and a small block to the east contains the linen-wagons.

Special blocks are in some cases erected for the hospital and general stores, as the "economy" block at Hamburg Eppendorf, while at others they are contained on the upper floors of the kitchen and laundry blocks. Detached ice houses for ice storage are found at Hamburg Eppendorf and Dresden.

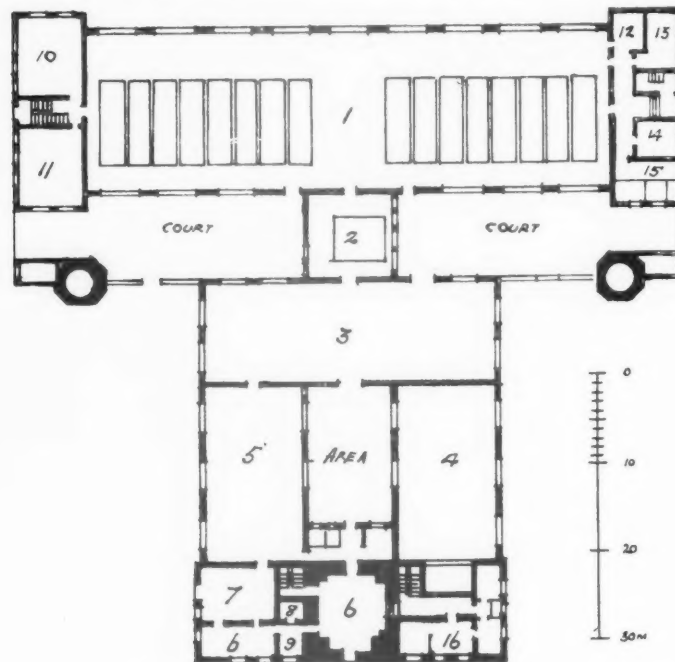


FIG. 56.—GROUND FLOOR PLAN OF THE BOILER AND ENGINE HOUSE BLOCK, THE VIRCHOW HOSPITAL, BERLIN.

- 1, Boiler House. 2, Pump Room. 3, Engine Room. 4, Accumulators. 5, Water Supply. 6, Water Tower. 7, Ice Machine. 8, Ice Store. 9, Ice Delivery. 10, Engineer's Workshop. 11, Smith and Plumber. 12, 13, Engineers. 14, Staff Dining Room. 15, Bath and Lavatory. 16, Electrical Engineer's Apartments.

#### TECHNICAL BLOCKS.

The technical blocks, comprising the boiler- and engine-houses for the provision of the heating, water supply, lighting, and power for the hospital, the workshops, and the disinfection blocks, are usually grouped together in a convenient and

central position, with separate access from outside.

The boiler- and engine-house block [fig. 56] at the Virchow Hospital, Berlin, may be taken as a typical example. The boiler-house [fig. 57] is 197 feet long by 59 feet wide, and contains

16 boilers of the Lancashire type with superheaters, eleven of which with a pressure of eight atmospheres are for the heating and hot-water supply of the whole hospital, the cooking, disinfecting, and sterilising apparatus, and five with a pressure of eleven atmospheres are for the electric lighting supply, the pumps for the water supply, and the ice machine.

The pump-room contains the steam distribution valves, the pumps, and the condense water-tanks under. The engine-house is 110 feet long by 36 feet wide and contains three dynamos for the electric lighting supply and power. The water supply room contains the apparatus for the cold and hot water supply of the whole hospital. The adjoining rooms contain the ice machine, which is capable of providing 43 cwt. of ice in 24 hours by the

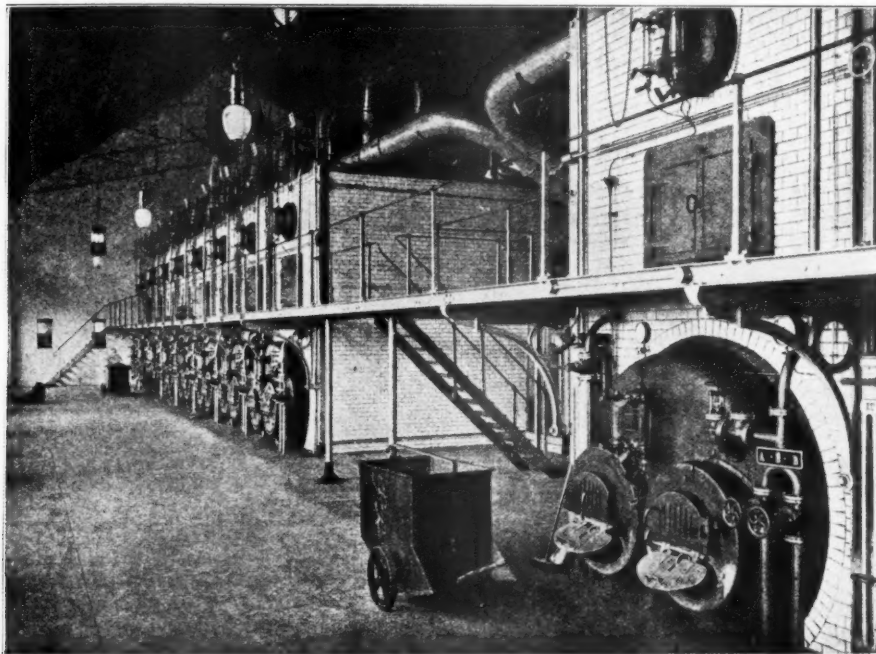


FIG. 57.—THE BOILER HOUSE, THE VIRCHOW HOSPITAL, BERLIN.

sulphuric-acid compression process. The remaining rooms comprise staff apartments and offices, engineers' and electricians' workshops, etc.

The workshops block at the Virchow is situated close to the boiler-house, and contains large workshops for the upholsterer, joiner, painter, and glazier, and offices, and on the upper floors large hospital stores.

The disinfection blocks are always very large and complete, owing to the fact that the hospitals usually contain an infectious diseases department, and also that the blocks are often used for the disinfection of the bedding and articles brought from houses in the cities where infectious disease has occurred.

The block at Charlottenburg West End [fig. 58] is a good example of the type. The apparatus employed does not differ greatly from that in use in England. Superheated steam is employed for disinfecting clothing, bedding, and mattresses, boiling for smaller articles, and formalin chambers for leather, fur, and felt articles. The disinfectors [fig. 59] are built

into a wall forming infected and disinfected sides, access from one side to the other being only through a bath-room with dressing- and undressing-rooms adjoining. The patients' clothes are stored in bags hung on special hooks in a large clothes store in the roof. Two destructors are provided for bandages, refuse, etc., and a disinfecting and cleansing apparatus for the vessels in which the infected bandages are brought from the infectious diseases department. A small discharge department for patients on discharge from the infectious diseases department is also provided, comprising undressing, bath, and dressing rooms.

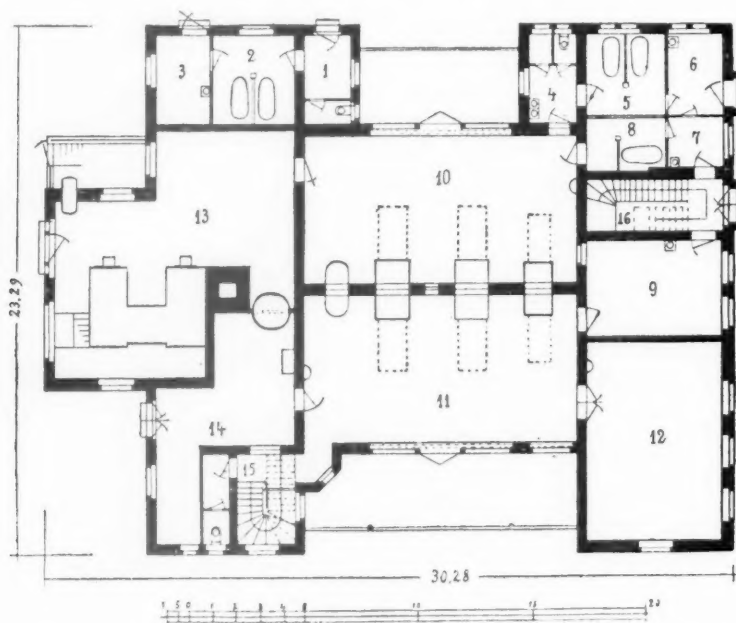


FIG. 58.—GROUND FLOOR PLAN OF THE DISINFECTIOIN BLOCK, CHARLOTTENBURG WEST END HOSPITAL.

- 1, 2, 3, Undressing, Bath, and Dressing Rooms for patients on discharge from the Infectious Diseases Department. 4, 5, 6, Disinfection Attendants' Undressing, Bath, and Dressing Rooms. 7, 8, Officials' Undressing, Bath, and Dressing Rooms. 9, Disinfection Overseer. 10, Infected Side. 11, Disinfected Side. 12, Mattresses etc. Store. 13, Destructor Department. 14, Delivery Room for Bandage Receptacles. 15, Staircase to Patients' Clothes Store. 16, Staircase to Disinfection Attendants' Apartments.

In those hospitals, such as Dresden Johannstadt, which are the centres for the municipal ambulance service, complete stables and coach-houses with drivers' apartments are provided.

#### GROUNDS.

The German hospitals are always remarkable for the lay-out of their grounds, the Virchow Hospital, Berlin, being a fine example. Here a large portion of the site is laid out as a park [fig. 60] for convalescents, and provided with garden pavilions and summer-houses, while the fine central avenue [fig. 61] with its four rows of large trees and gardens, and the architectural courtyard, have already been described. Other fine examples are Cologne Lindenburg [fig. 62]—and Charlottenburg West End, where the central spaces between the medical and surgical departments are very well laid out. In the majority of the hospitals large green-houses are provided, and also in many cases vegetable gardens.

## HEATING.

The heating system adopted in the German hospitals is almost invariably derived from a central source—the boiler-house—the steam being conveyed from the boilers in the main through subways to the separate blocks, usually at a pressure of about eight atmospheres. At Hamburg Eppendorf a separate heating installation was originally provided to each pavilion, but the disadvantage of the constant coal traffic through the grounds, and the smoke production from the various chimneys, led in recent years to the grouping of three or more pavilions together for heating purposes, while in the pavilions of the new infectious diseases department recently erected the heating is derived from a new central boiler-house.



FIG. 59.—DISINFECTING APPARATUS, THE VIRCHOW HOSPITAL, BERLIN.

The heating medium generally employed is radiation, the usual methods being either by low pressure hot water or atmospheric pressure steam. If the former, each block is usually treated separately from heating calorifiers placed in the basement. The radiators are almost invariably open, and are of the vertical loop type, bracketed clear of the walls; or a form much employed is some half-dozen horizontal pipes about two inches in diameter, placed one above the other, and running round the window walls to sill height. If the heating is by steam it is reduced on entry into each block to the required pressure, usually about 1/10 atmosphere, though it varies in the different hospitals. The radiators for steam heating are of the vertical loop type.

Speaking generally, administrative, domestic, and technical blocks are heated by steam, pavilions and blocks for patients by hot water, but this rule is subject to much variation. Operation houses, where a high temperature may be required at short notice, or bath and similar rooms, which may occasionally require to be heated in summer, are as a rule heated



by steam. The special methods adopted for the heating of operating theatres have already been described.

At the Johannstadt Hospital, Dresden, the heating is by hot air, the heating and ventilation being combined.

At the Eppendorf Hospital, Hamburg, the original method of heating the wards was by warming the terrazzo floors by steam pipes suspended in channels beneath the floors, after the manner of the Roman *thermæ*. It was claimed for this method of heating that while the feet were kept warm the head was kept cool, the heat was diffused equally, and a thorough circulation of the air was ensured, but in practice it has been found that the floors are most liable to crack, they in many cases having to be relaid every five years, while the nursing staff by continually working on the heated floors are rendered liable to various ailments. In the new infectious diseases department at this hospital the heating is by steam radiators.

In many cases, however, steam pipes are suspended beneath a ground floor with the intention of warming the floor to a similar extent as the first floor is warmed by the heated rooms under, and so to take the chill from the tiles or terrazzo floor.

All windows are usually double-glazed so as to prevent loss of heat by radiation.

The usual temperature specified for the wards and patients' rooms is about 68° Fahr., for staff and sanitary rooms about 64° Fahr., for operating theatres about 86° Fahr., and for rooms in the administrative and domestic blocks about 68° Fahr.

Open fires as a heating medium are practically unknown, the one source of smoke in the hospital being the boiler-house stack, where the smoke production can be scientifically controlled.

#### VENTILATION.

The prevailing opinion in the German hospitals appears to be that natural ventilation is preferable to artificial methods. Some form of ventilating apparatus is, however, almost invariably installed for use in winter, as during the cold weather it is often impossible to open the windows of the wards, and on rare occasions in summer ventilating apparatus may be required.

The windows are almost invariably casements opening in with fall-in fanlights over. It is claimed for this type of window, as against the English sash window, that it is less complicated in construction, that the whole area of the window can be opened, as against only half with sliding sashes, and that the casements protect the beds on either side from draughts.

It is not usual to have direct inlets for fresh air from outside to the wards, but extract vents with ducts to the roof are usually provided at ceiling level for use in summer.

For use in winter the simplest form of ventilation is by aspiration, as, for example, that found at Hamburg St. Georg. Here inlet vents are provided at each end of the ward about seven feet above the floor level, through which the fresh air warmed by steam-pipes in the basement enters. Extract ducts to the roof for the foul air are provided at each end of the ward, with vents at floor level.

This form of ventilation is found in many hospitals, with variations in detail, such as the addition of screens for filtering the air, water-troughs for humidifying the air, or the placing of aspirating coils in the extract ducts to increase the ventilation. Mechanical means are often employed, usually by propulsion, occasionally by extraction, by propulsion and extraction combined, or by propulsion and aspiration, each block as a rule being separately treated, it not being usual in the German hospitals to employ a central system.

At Charlottenburg West End the air is led from special intakes through a filter, over a heating battery with humidifying vessel, and into a mixing chamber, where the requisite temperature is attained, after which it is driven by a fan through ducts into the upper portions





FIG. 60.—VIEW IN THE PARK, THE VIRCHOW HOSPITAL, BERLIN.



FIG. 61.—THE CENTRAL AVENUE, THE VIRCHOW HOSPITAL, BERLIN.

of the rooms. Extract vents for the foul air are provided at floor level to ventilating turrets on the roof, in which aspirating coils are fixed.

At Schöneberg propulsion is combined with aspiration, the fresh air being drawn by an electric fan through a heating battery, in which it is warmed to a temperature of 60° Fahr., into a very large warm air chamber, which extends for nearly the whole length of the pavilion. From this chamber vertical ducts ascend to the various rooms, a radiator at the foot of each duct raising the ascending air to the required room temperature. The inlet vents are just below the ceiling level, and extract vents at floor level, each with a separate duct, lead the foul air above the roof and into the open.

At the Virchow Hospital, Berlin, propulsion is combined with extraction, there being an electric fan in the basement and one in the roof of each pavilion, it being possible to produce a complete change of air five times per hour in all wards, rooms, and corridors. The fresh air passes over a dust-precipitating chamber, through a cotton-wool filter, and then over a heating battery, after which, mixed with the requisite proportion of cool air, it passes through the ducts into the upper portions of the rooms. The extract vents are placed in the lower portion of the rooms, and the foul air is extracted through ducts to the electric fan chamber in the roof, and driven out through the ridge turrets into the open. In the large wards of the one-story pavilions the fresh warmed air enters at each end, through two vents, each about 2 feet 6 in. by 1 foot 6 in., placed above each of the doors, at a height of 11 feet 6 in. above the floor. The foul air leaves through four vents about 9 in. by 8 in. on each long side between alternate windows and placed 1 foot 6 in. above the floor. In the other rooms of the pavilion the ventilating arrangements are similar to those of the large wards, except in the sink and water-closet rooms, where extract vents only at ceiling level are provided, the ducts from these being kept entirely separate from those of the other rooms until just before the fan chamber.

At Munich III. special dust-depositing chambers and washing filters are employed, while the ducts are oval or circular in section, and can be flushed out.

At the Johannstadt Hospital, Dresden, in which the apparatus is capable of producing a change of air of five times per hour in the wards, the heating and ventilation are combined, being by hot air. The fresh air passes through a heating battery in which it is warmed to a temperature of 59° Fahr., and is then driven by a fan into the large warm-air chamber which extends for the whole length of the pavilion, and serves at the same time to precipitate the dust and to warm the floor above. From this chamber vertical ducts ascend, at the foot of each radiators being placed to warm the air to the necessary temperature for heating the rooms. The ducts, two of which are placed in the centre of the floor of each large ward, are constructed of sheet-iron about three feet long, two feet wide, and six feet high, the top being covered with a grating. The extract vents for the foul air are at floor level, and lead in ducts to extract turrets on the roof.

In such hospitals as Schöneberg or Dresden, where ample room and light are provided, and the ventilating installation can be easily inspected and cleaned, the cleanliness of the system appears to be all that can be desired. In some of the hospitals, however, in which the ventilating rooms are cramped, the lighting deficient, or in which the main ventilating ducts also contain the heating and other pipes, the cleanliness often leaves much to be desired: indeed in the recent extensions to the Frankfort City Hospital no form of mechanical ventilation is being installed, as it has been found that in the older pavilions the ventilating apparatus has got into such a bad state.

The usual amount of fresh air specified for the large wards is 2650 cubic feet per bed with a change of twice per hour, for day-rooms, bath-rooms, and ward kitchens a change of twice, and for sanitary rooms a change of five times per hour.

## LIGHTING.

The lighting of the hospitals is almost invariably by electricity, derived either from the municipal supply or from generating plant in the hospital, as at the Virchow Berlin. Whenever possible two supplies are obtained and alternate lights wired from the separate supplies. The fittings are of great variety, some excellent types being found at St. Georg Hamburg. Arc lights are largely employed in the grounds, in the domestic and technical blocks, and for operating theatre work. Gas is also installed in some hospitals in case of breakdown, and is of course largely employed for cooking, sterilising, etc.

## COLD WATER SUPPLY.

The water supplies of the hospitals are usually derived from the municipal mains, though at Eppendorf Hamburg and the Virchow Berlin the supply is derived from the institutions' own plant. At the latter three artesian wells have been sunk, from which 10,600 cubic feet of water are raised per hour. Special plant is provided for precipitating the iron which the water here contains, and for filtration. The reservoir is of 8800 cubic feet capacity and is situated on the water tower 158 feet high, the pressure in the supply pipes being three atmospheres.

## HOT WATER SUPPLY.

The usual system of hot water supply is to place hot water supply calorifiers in the basement of each block, and to lead steam to them from the central boiler-house, each block being treated separately. At St. Georg Hamburg central hot water supply tanks are provided at the top of the administrative block. At Dresden Johannstadt and the Virchow Berlin the hot water supply is central, at the latter there being three calorifiers in the engine-house block, in which the water is heated by the exhaust steam from the engines to a temperature of from 70° C. to 80° C., and then circulated through the mains under the pressure of the supply from the water tower, thus giving at all mixing valves, etc., hot and cold water at the same pressure.

## SANITARY APPARATUS.

Lavatory basins are usually of porcelain, many different types being found. For operating theatre work the supplies are usually combined, giving a jet or spray with elbow action levers, and knee action wastes, pedal action fittings seldom being found.

Baths again are of various patterns, movable or fixed; porcelain, enamelled iron, and copper are found, but the latest and favourite material is nickel-plated steel, which is much employed.

In some hospitals the supply pipes to baths and lavatories stand clear from the walls, but in others, as the Virchow Berlin, they are placed in chases in the brickwork behind the tiled dados, which gives a very smooth finish but is somewhat awkward to deal with when repairs are necessary. With regard to traps, in addition to S and P traps some interesting forms of improved "bell" and "dip" traps are found.

Water-closets are usually of the wash-down type, though closets of the wash-out pattern are often found. The flush is usually from a cistern with pull, although at the Virchow pneumatic supply valves are employed.

The slop-sinks are of various types, those of English porcelain and manufacture being often employed.

The slop-sink disinfectors, as employed at the Virchow Berlin or Charlottenburg [fig. 63], for the disinfection of urine, faeces, and sputum, before discharge into the drains, are of considerable interest. They consist of a cylindrical copper vessel, tinned inside, and having a false bottom, with a sharp fall to the outlet to the drain. To disinfect the contents,

the lid and the outlet to the drain are closed, and steam is turned into the false bottom, the disinfection at a temperature of  $110^{\circ}$  C. being complete after about 15 or 20 minutes. The steam and gases from the boiling contents are led by a water condenser from the upper portion of the vessel into the drainage outlet below the trap. A ring spray is provided in the interior of the cylinder for the cleansing of the bed pans and other vessels, which can when occasion requires be disinfected in this apparatus.

In the majority of the hospitals well ventilated closets are provided for the retention of faeces etc. for examination by the doctor.

Wash-up sinks are often of porcelain, though the favourite material is perhaps durable metal, which is very largely employed.

#### DRAINAGE.

Although in some of the German hospitals the details of the drainage would not meet with approval from the English point of view, yet in others it is well up to the English standard, and as a rule the provision for disinfection is always greater.

The drainage system follows in general the English type, the great difference perhaps being that, owing to the climate, all soil, waste, and vent pipes are kept inside the buildings, the drains in the basements, often of cast iron, being suspended from the ceilings. Separate sewage and rain-water systems are often provided.

Many of the municipalities require that before discharge into the public sewers all drainage from the patients' and mortuary buildings must be disinfected. At Hamburg Eppendorf and St. Georg [fig. 64] central installations for this purpose are provided, by which all the drainage is collected in large tanks and treated with lime. At Nuremberg a central system is again installed, the disinfection here being by the Müller-Nansen process. At Dresden Johannstadt a separate installation is provided for every two blocks, the disinfection being by lime. At Charlottenburg West End each ward floor contains a slop-sink disinfector, as already described, in which all faeces, etc., can be disinfected before discharge. This type of apparatus is much employed in pavilions for infectious diseases, as at the Virchow Berlin and Düsseldorf. The drainage from mortuary blocks is usually collected in tanks and disinfected by lime.

#### TELEPHONE SYSTEMS, ETC.

As a rule all hospitals have a very complete system of inter-departmental telephones; at the Virchow, for example, there are 95 speaking points, of which 20 can be used for external communication, the installation being controlled from a central exchange in the administrative block.

Alarm bells from the wards to the nurses' rooms are also invariably installed, and electric clock systems for recording the alertness of the night attendants are found, particularly in the insane blocks.

Vacuum cleaning apparatus is often installed throughout, as at the Virchow Berlin and Munich III.

#### COST OF LAND, BUILDINGS, AND EQUIPMENT.

The cost of the various hospitals of course varies greatly according as their locality, construction, or equipment varies. For example at Nuremberg the cost of the site was £6250, the cost per bed of the buildings £175, and of the equipment £39, or a total cost per bed for buildings and equipment of £215, while at the Johannstadt Hospital, Dresden, the cost of the site was £84,000, and the cost per bed for buildings and equipment was £357. In the well equipped and recently erected infectious diseases department at Hamburg Eppendorf for 200 beds, the cost per bed for the buildings has been £483, for the equipment £91, or for

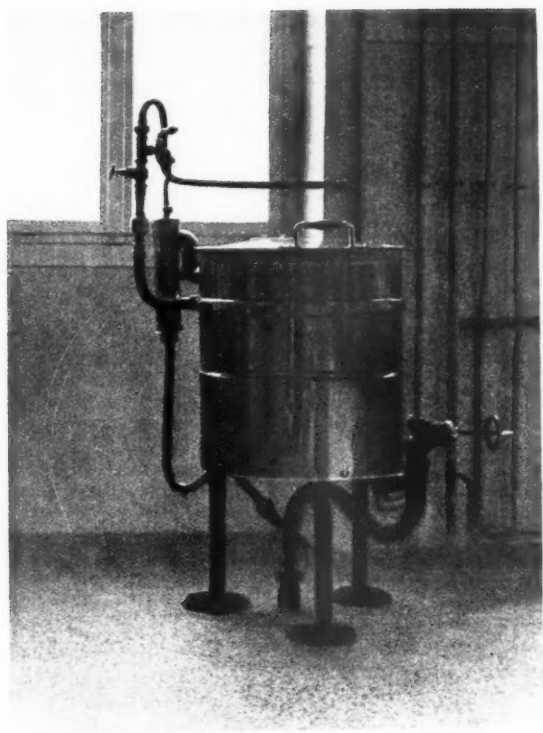


FIG. 63.—SLOP SINK DISINFECTOR, CHARLOTTENBURG  
WEST END HOSPITAL.

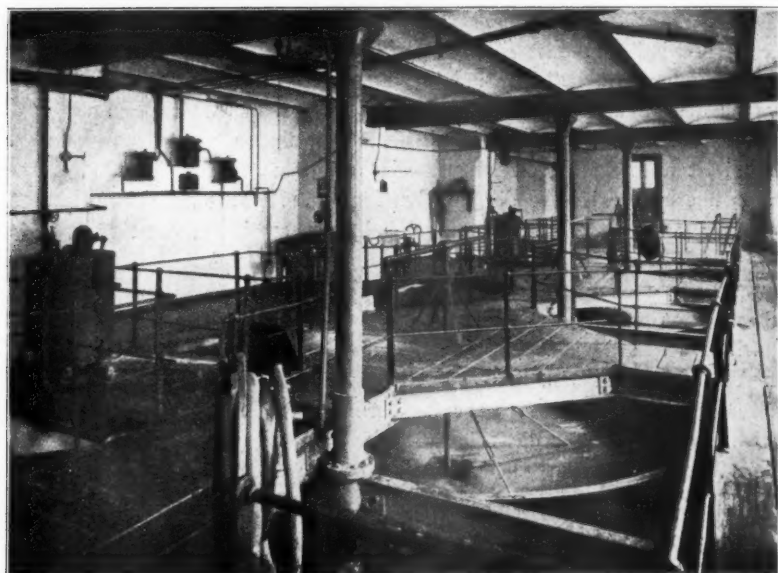


FIG. 64.—DRAINAGE DISINFECTION INSTALLATION, HAMBURG ST. GEORG HOSPITAL.



the buildings and equipment together £575, while at the Rudolf Virchow Hospital, Berlin, the cost per bed for the buildings has been £408, for the equipment £68, or for buildings and equipment together £477.

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- |   |  |
|---|--|
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THE END.



## THE CRISIS.

IF I could think of some heading for this notice more arresting and alarming than the word I have chosen I would gladly use it. A desperate case and a possible remedy; these are the subjects of the work I review. It is a "Blue Book," no other in fact than the "Report of the London Traffic Branch of the Board of Trade 1911." We have now had four of these volumes, and the significance of them is tremendous. Their object is to be a sequel to the Report of the Royal Commission on London Traffic, which appeared and (must I say it?) disappeared in 1905. Year by year they continue the investigation begun by that Commission, they bring its evidence up to recent date; they emphasise the urgency of its message, and they revise, when necessary, the proposals for remedy. The price of the book is 5s. 4d., and anybody who studies London as a town, from almost any point of view, would find himself interested by the purchase of it.

These Reports come at us like Old Testament prophets with the simple and insistent repetition of a message so weighty, so clear, and so deeply urgent, that nothing except man's habitual deafness to prophecy can explain or excuse the apathy with which they are received.

Of course, bad news can always be set aside, and remedies can always be postponed. The most dramatic conclusion of the present matter would be that in this case also the tidings should be disregarded and the advice ignored. The climax—a perfectly certain and (historically) very interesting climax will then follow; but it is doubtful whether our successors will take full enjoyment in a dénouement which, however successful as a fulfilment of foreboding, will be to the onlookers and participants disastrously costly.

What is the value and significance of this Report, and why is its significance so urgent? The answer, I think, may be put thus: We have here no amateur suggestion for a London improvement; no mere guess at the nature and extent of the mischief to be dealt with; still less have we the irresponsible utterance of an untrained corporation. We have instead a pronouncement of quite unusual authority and weight.

Do we Londoners at all realise that as a sequel to much private opinion which is, of course, contradictory, and to the Royal Commission which is (quite unjustly) ineffectual, we have now got a department of a Government office dealing with the London problem in a systematic and energetic—if for the moment theoretic way?

Do we realise that, instead of listening to the utterances of lecturers and newspaper correspondents or even to Royal Commissioners, we are now getting facts and advice from a body which has authority and executive power?

That the subject, which is architectural in the

highest sense, should be handled without acknowledged architectural advice I regret profoundly, but I do so with the conviction that the department, which has already gone so far and so well, will before long assist England and London to rectify that omission.

Obviously the laborious collection of facts upon which the arguments of this book are based has not been brought together without the labour of many men, but, though one must not look upon a Government publication as the work of an individual, it is easy to see that there has been a guiding mind of exceptional strength, and we shall not be far wrong in identifying the ruling intelligence with that of Sir Herbert Jekyll, whose name is subscribed to the Preface.

Briefly his message to London is that London's traffic difficulty is increasing; that although the improved means of locomotion introduced during the last ten years were in themselves so effective as for a time to outstrip the ever-growing pressure, crisis is still upon us, and must be dealt with. An immense growth of population in the outskirts, so far from being relieved by an actual diminution of population in the centre, indicates that for the purposes of daily entry to the working quarters of the town a larger number have to be conveyed over a greater distance, and all these facts relating to the new distribution of population are set forward, not merely in general terms, but in well-attested and minute statistics.

We are thus brought at once to the consideration of the road improvements which form the gist of the compiler's advice. These proposals, both as regards the widening of existing roads and the formation of new routes, are best studied on one of the maps with which the Report is accompanied.

The map entitled "Plate I." is that to which I specially refer. It deals with a radial distance of twenty miles from St. Paul's, and it aims, as one would expect, at counterbalancing that defect from which London suffers in common with all large towns—the existence between the main arterial roads of wedge-shaped tracts, which might very properly be occupied both by relief roads tending towards the centre, and by one or more circumferential roads.

Of the former type we observe such suggestions as the oft discussed Brentford Bypass (which is to run north of Brentford High Street); the proposed western avenue which, starting from Paddington, is to join the Oxford road just beyond Uxbridge; a short branch route from the St. Albans road, which, if it had been made a few years ago, would have saved the beauty of Edgware, now miserably disfigured; a new Cambridge road, spacing and relieving the crowded Edmonton thoroughfare; the new Eastern Avenue, which gives an alternative for the Colchester road as far as Romford; a new route through Camberwell to Lewisham; and, again, another in the Surbiton district.

All these roads taken in connection with intended widenings of existing main thoroughfares may be regarded as excellent and well-thought-out expedients towards the relief of the traffic between outer and inner London.

The next feature that attracts our attention—and it is a most interesting feature—is the proposal for circular or circumferential roads north and south of the Thames. From Charing Cross as a centre and with a radius of seven and a half miles turn an arc from Kew Bridge to Wanstead and that will give you within a little the course of Sir Herbert Jekyll's northern proposal. It is most ingeniously planned so as to make use of a bit of existing road where possible and to intrude as little as may be upon land already under costly occupation. The intended southern arc is of rather shorter radius and runs from Battersea to Woolwich *via* Lewisham.

No suggestion is made of completing the circular girdle by linking up from Kew to Battersea or from Woolwich to Wanstead, but in view of the fact that a Thames tunnel is in course of construction at Woolwich it would seem at least desirable to aim at such measures as would make these new routes completely circumferential.

The attempt to give anything like a summary of the information and suggestions contained in the Report would fill a very long review. It is enough to say here in conclusion that its importance at the present juncture hinges not merely upon the urgency of the traffic trouble but also and almost equally on the fact that several of the suburbs are engaged in producing (whether under the Town Planning Act or independently) schemes for the laying out of building estates and the formation of new roads. In this connection it is of the utmost importance that the much-desired general scheme, which this Report so warmly and so wisely advocates, should be formulated, adopted, and authorised; otherwise the present golden opportunity may be lost.

Road improvements and road additions recommended here could quite easily be incorporated in such suburban land schemes as are at present under contemplation, and in the case of plans ratified under the Act it will be perfectly easy for the Local Government Board to insist upon such incorporation. If, however, no general plan is enforced, mistakes may now be made which will in their turn contribute additional load to the costly burden which our unpardonable delay is laying upon the future.

I venture to repeat once more a small suggestion which I made last year as to the valuable maps. In future editions the actual positions of the roadside towns should be made clearer. No one, for example, would gather from the method of nomenclature adopted that the "Watling Street" road passes through Edgware and Elstree, and the very important road-town Hounslow is once again entirely omitted from some of the maps.

PAUL WATERHOUSE [F.].

## THE FUTURE OF LONDON.

LONDON is overwhelming in its claims and needs. As the greatest city the world has ever known, in its extent, population, and variety of interests, it has outgrown all proper design, from both an artistic and a practical point of view. Viewed in its artistic aspect it is certainly not the greatest or finest city, and yet it is possibly not too late for it to become so. If about one hundred years ago the whole subject of London development had been taken in hand and some settled scheme been adopted, many bad and ineffaceable blunders would have been avoided. But new streets have been laid out, great and important buildings erected, and areas cleared in an arbitrary and interjectory fashion which can never produce satisfactory results. It is inconceivable that there will not be, before very long, some executive body which shall be primarily and finally responsible for the future of this great city. But, knowing the past records of most governing bodies, it is almost hopeless for us to expect that adequate consideration will ever be bestowed on the artistic aspect of this future. And it is only by the maintenance of great ideals and a persistent endeavour to attain them that any real measure of success will be achieved. To attain this object it is suggested that a body of opinion should be collected and reinforced from time to time to stimulate public interest and effort for the elevation of London into a fine city, worthy to be the capital of a great empire. Surely it is time that all who are interested in the future of this great city and can do any service on its behalf should bestir themselves to rescue it from the *laissez-faire* condition which now exists and which must have disastrous results? Those with whom we have conferred on the subject seem as much appalled at the task of saving London as they are at the fate which must befall it, unless some wise and concerted action be taken. Things are happening every day which make the task a harder one, and very serious questions are now before us which call for wise counsel and energetic action. Let us call to mind a few of these.

The new St. Paul's Bridge is surely a subject of debateable interest—whether we take it from the point of view of traffic or art. No one dare pretend that art must go before traffic of course, but we have seen it very ably and convincingly stated that, from the point of view of traffic, the new St. Paul's Bridge will be a great mistake, and that the traffic would be much more congested if poured out at the east end of St. Paul's than if it found its way right and left of the south transept. Some of us think that no great modern project has been a greater mistake than the proposed St. Paul's Bridge or more likely seriously to injure the artistic aspect of London.

Then we have the question of lines of traffic

generally in London. No one doubts that they need serious consideration, and some suggest that a great ring road should be formed and some effort be made to provide better lines of intercommunication and to relieve congestion of traffic.

Great developments have taken place at Westminster, and new Government Offices, a Town Hall, and other public buildings are now going up, all of which might have been productive of a fine and well-ordered effect had the sites and frontages of projected buildings come under the consideration of a body of well-qualified experts.

Trafalgar Square presents the most splendid possibilities quite within the range of practical politics, and we know of a great scheme for this which would be forthcoming at once were there any chance of its being carefully considered by a competent body. The new entrance from the Mall brings the Trafalgar Square improvement into the front rank of necessary London developments.

The County Hall is creating a new and important centre on the south side of the Thames, and we consider it a blot on our government and control of London that it is just dumped down at a corner of Westminster Bridge without any wise and sensible provision for the creation of a fine environment. It has actually been suggested that a great Indian Museum should be ranged alongside it!

The Memorial to King Edward is being projected for a site on which we can hardly believe any large bulk of expert opinion is agreed and which suggests that it was chosen as a policy of despair.

A really fine scheme of continuing the Thames Embankment westward from the Houses of Parliament was nipped in the bud because it was a private enterprise, and it is doubtful whether anything really fine is ever likely to take its place.

For long we have wondered why fine roadways from the Strand and Fleet Street down to the Thames Embankment could not have been created. A magnificent scheme for a roadway up from the Embankment to the Strand and opening out to the Law Courts would once have been possible.

That the British Museum should long since have been opened out by a roadway from its main entrance to Oxford Street appears almost to go without saying and is surely not yet an impossible vision.

When we take into account the things which have been done and which can never be undone, the lack of foresight is truly appalling. The lost chances of Ludgate Hill leading up to St. Paul's from Ludgate Circus are amongst the most lamentable of all. The spreading out of the great railway termini along the northern part of central London is a mighty and irremediable blunder which is now being partly repeated by the isolated action of the underground tube constructions.

No greater improvement for London could be imagined than the doing away with Charing Cross railway bridge and the creation of a fine terminal

station for the South Eastern Railway about Waterloo. Every year which passes by adds enormously to the difficulties of this improvement.

The lack of a great southern embankment to the Thames is one of the most obvious and outstanding failures of London in rising to the greatness of its opportunities.

One might continue a list like the above almost indefinitely. The outlook over the past as regards lost chances and even the future, or as regards fine possibilities, is so significant as to be almost overwhelming. Is there not then an urgent need for the creation of some permanent and active expert advice which may at all times be on the alert to promote the artistic development of the city? It is not a question of the expenditure of millions of pounds to add to the burden of the over-taxed ratepayer. It is a question of how the constant development of streets and great building enterprises may be guided and controlled to the best results, of how expenditure which is inevitable may be laid out in the most desirable way, and how costly and unworthy schemes may be prevented from realisation. Could not a London Society be formed to promote the great objects we have in view and so help to lay the foundations for a fine imperial city?

T. RAFFLES DAVISON [*Hon.A.*].

#### THE LATE HONORÉ DAUMET.

ALTHOUGH not the senior, M. Daumet was better known than any other of our French corresponding members, owing to his frequent visits to England and the fact that he made a point of attending all the International Congresses here and in other countries, being always accompanied by Madame Daumet. M. Daumet was born in Paris in 1826 and entered the *Ecole des Beaux-Arts* in 1846, passing into the first class in 1849. He was a pupil in the atelier of Blouet, the author of the publication on the "Baths of Caracalla" and of his successor, Gilbert. He carried off the Grand Prix de Rome in 1855, and his principal "envoi" was the Villa of Hadrian at Tivoli, together with a conjectural restoration of the same. The work was of so extended a nature that he persuaded some of his pupils, also Grand Prix men, to continue the researches in later years. M. Daumet was elected a member of the Institute of France in 1885, and was created Chevalier, Officier, and Commander of the Legion of Honour in 1865, 1892, and 1900, respectively. He was also Commander of the Order of Alfonso XII. of Spain, Knight of the Order of Pius IX., Officier de l'Instruction Publique, and in 1908 he was accorded the Royal Gold Medal of the Institute, to which he attached the greatest value.

His principal works were the Palais des Facultés at Grenoble, the Palais de Justice, Paris, in con-

junction with M. Louis Duc, after whose death he designed and carried out the "Cour de Cassation" and the "Cour d'Appel," the Palais de Justice in Grenoble, and the restoration of the Roman Temple and of the Church of St. Pierre, both at Vienne in the south of France. One of his earliest works was the buildings of the *Etats Pontificaux* for the Great Exhibition of 1867. In 1871 he was attached with M. Heuzey to an archaeological commission appointed to survey the ancient architecture of Macedonia, where he discovered the remains of a palace at Palatizza, of which he made a conjectural restoration; the results of this expedition were published in 1876, and there is a copy, presented by M. Daumet, in our Library. One of the most important of M. Daumet's commissions was the rebuilding of the Château of Chantilly, which, with the exception of the Henri II. wing, had been entirely destroyed at the time of the Revolution. This work was entrusted to him in 1876 by the Duc d'Aumale, and it took six years to complete. In 1882 he started a private atelier, and no fewer than nine Grand Prix de Rome students were trained by him, one of them being the late Mr. McKim to whom the Royal Gold Medal of the Institute was accorded in 1903. M. Daumet served on the numerous juries of the *Ecole des Beaux-Arts* and on the *Commission des Monuments Historiques*; he was *Hon. Architecte-en-Chef* of the Department of the Seine, *Hon. Inspector of the Conseil d'Architecture de la Ville de Paris*, member of the *Société des Architectes diplômés par le Gouvernement* and of the *Société des Artistes Français*, and was Past President of the *Société Centrale des Architectes Français*. About seven years ago M. Daumet organised an International Committee for the protection of the professional interests of architects, chiefly in relation to copyright in architectural design; of this committee he was elected Chairman and he devoted his energy and perseverance to its promotion.

His last work was that of the completion of the restoration of the Palais de St. Germain, to which he devoted the last ten years of his life and of which there is a descriptive account, illustrated, in our Library.

M. Daumet attended the International Architectural Congress in Rome last October, and subsequently with Madame Daumet renewed his acquaintance with Florence, Venice, and Turin. He wrote me a letter on the 30th November in which he stated that the state of his health was normal, and that he was able to work on his drawings, his only trouble being a certain fatigue when walking; three days later, however, he was taken ill, and he passed away on the 12th of this month. M. Daumet married, early in the sixties, the eldest daughter of M. Charles Questel, the architect of the Cathedral of Nîmes and the Church of St. Paul in that town; he also was the patron of the atelier from which many Grand Prix students were sent

to Rome; in fact, when I entered the atelier in 1858 there were five students, each of whom eventually carried off that prize. It would seem that he caught a chill when attending a jury appointed to select the best designs in a competition for the buildings projected for the *Ecole Militaire* in the Champ de Mars, and from this he never recovered. M. Daumet was buried in the cemetery of Montparnasse on Friday, 15th December, a previous service having been held in the Church of St. Sulpice.

R. PHENÉ SPIERS, F.S.A. [F.].

#### DAUMET. A PERSONAL NOTE.

Honoré Daumet is dead! By reason of his years, exceeding by five the Psalmist's fourscore, his death can hardly be called unexpected, but it will be felt as something of a shock by those who met him during the recent meetings of the International Congress at Rome, where his assiduous vigour amazed his younger colleagues. "Il est de bronze," said one of his friends. The members of the Comité Permanent especially will mourn the loss of the venerable though alert figure, who for many years presided over their meetings with dignity and unvarying courtesy.

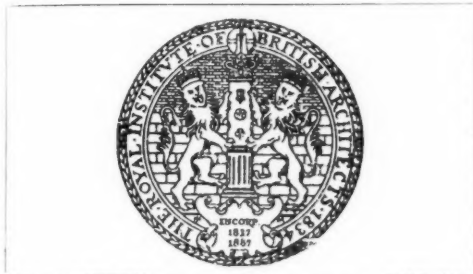
He was greatly beloved by his brother artists. Not the least enviable of the advantages of his French atelier system is the tender reverence with which such masters as Daumet and Pascal are regarded by the men of a younger generation, even when these are of equal or, it may be, of superior, position and attainments. The effect of the continuous tradition of art and training is to keep the elder men in close touch and sympathy with the younger; and to preserve throughout their lives a cordial intimacy, which with us exists only in rare and individual cases. Emulation in France is keen enough as between men of like age, but that hard and jealous competition between young and old which tends to keep them apart is almost unknown.

The scent of my "Maryland," as I write, brings kindly memories of the old artist at his desk, working on a delicate and beautiful small-scale drawing of a great stairway at Nice, for the late King Leopold, which might have tried even youthful sight. "His eye was not dim, nor his natural force abated."

Daumet, Pierre-Jérôme-Honoré, Membre de l'Institut, Grand Prix de Rome, Gold Medallist of the Royal Institute of British Architects, a very perfect type of the French gentleman, was born in Paris in 1826, and has now gone to his rest, full of years and full of honours. R.I.P. *Fiant novissima mea horum similia.*

JOHN W. SIMPSON [F.].





9 CONDUIT STREET, LONDON, W., 23rd Dec. 1911.

## CHRONICLE.

### The Newer Responsibilities of Architects.

Of the four Papers on "The Newer Responsibilities of Architects" arranged by the Practice Standing Committee and announced for reading at the General Meeting last Monday, it was found desirable, having regard to the time at the disposal of the Meeting and to the fact that one of the Papers dealt with a case which is to be the subject of further litigation, to read only the two prepared respectively by Messrs. W. Henry White [F.] and Edward Greenop [A.]. These will be published in the next number of the JOURNAL, together with the important speeches delivered on the occasion by Messrs. A. M. Brice and G. R. Blanco White, Barristers-at-law. On the motion of the President, further discussion was adjourned to a date hereafter to be fixed, when the Papers by Messrs. A. Saxon Snell [F.] and Wm. Woodward [F.] will be read. It is intended that the discussion at the adjourned Meeting should cover the ground of the whole four Papers.

### Architects of the Office of Works.

The following questions and replies were printed in the Parliamentary Papers of the 15th inst. :—

Mr. Noel Buxton: To ask the honourable Member for Southampton, as representing the First Commissioner of Works, whether his attention has been called to a recent Address delivered by Mr. Leonard Stokes, the President of the Royal Institute of British Architects, in which he has expressed his dissatisfaction with the work done by the architectural staff of His Majesty's Office of Works; whether he will state the classes and the total number of architects employed in his department; and what number of them are Fellows, Associates, or Licentiates of the Royal Institute of British Architects.

Mr. Dudley Ward: The answer to the first part is in the affirmative.

There are two principal architects employed, both of whom are Fellows of the Institute. In the next class, architects and surveyors, there are ten employed, of whom six are Associates and one a

Licentiate of the Institute. The next class consists of nineteen assistant architects and surveyors, of whom five are Associates of the Institute. There are twenty-seven assistant architects and surveyors of the second class, of whom thirteen are Associates of the Institute.

Since 1907, twenty-three architects and surveyors have been appointed, of whom thirteen are Associates of the Royal Institute of British Architects.

Mr. Noel Buxton: To ask the honourable member for Southampton, as representing the First Commissioner of Works, whether his attention has been drawn to the Address delivered by Mr. Leonard Stokes, the President of the Royal Institute of British Architects, on the 6th November; whether he will state the percentage which the cost of the architectural staff of His Majesty's Office of Works for salaries alone forms of the whole outlay; whether he will state what buildings have been entrusted to independent architects, not in the Office of Works, during the last sixteen years; and whether, in the interests of economy, he is prepared to consider the desirability of abolishing the architectural staff of the Office of Works and entrusting the work to independent architects.

Mr. Dudley Ward: The reply to the first paragraph is in the affirmative.

In reply to the second paragraph, the percentage which the cost of the architectural staff of His Majesty's Office of Works for salaries alone forms of the whole outlay is 3.34, and not 6½ per cent., as stated.

In reply to the third paragraph, the following buildings have been entrusted to outside architects: (1) Government Offices, Whitehall, southern building; (2) New War Office; (3) New Admiralty, Block III.; (4) New Admiralty, Block IV.; (5) Victoria and Albert Museum Extension; (6) Royal College of Science, Imperial Institute Road; (7) British Museum Extension.

In reply to the last paragraph the answer is in the negative, although the First Commissioner will be prepared to consider any exceptional conditions which might render it desirable in the future, as in the past, to entrust certain specific works to architects outside his department.

### Office of Works Architectural Assistants.

Mr. Dudley Ward, in the House of Commons last week, informed Mr. Snowden that before any steps were taken to place any of the class termed architectural assistants engaged with the Office of Works on the established list, the desires of all who were so eligible would be ascertained, so that all of the class should have an opportunity if they so desired of being placed upon the established list. He also stated that the Treasury did not regard the technical certificate of the Board of Works Commissioners granted to each member of the architectural assistants as being equivalent to the certificate

granted by the Civil Service Commissioners to the class engaged upon similar work and termed assistant architects. It was not intended to carry the same privileges of establishment, equivalent pay, superannuation, and regular annual increment.

#### Gift to the University of London.

At the meeting of the Senate of London University on the 13th inst., the Principal announced that he had received from the Chancellor (Lord Rosebery) a letter written to him by a gentleman, who desired for the present to remain anonymous, offering to erect at University College "the buildings for (a) the combined School of Architecture [resulting from the amalgamation of the schools at present separately conducted at University College and King's College], together with the following—so far as a sum of £30,000 will suffice—viz.: (b) Studios for the teaching of sculpture and the rearrangement of the School of Fine Art, and (c) the Department of Applied Statistics, including the Laboratory of Eugenics." A resolution was passed expressing the Senate's cordial appreciation of this munificent offer, and the matter was referred to the Academic Council, to the University College Committee, and to the Finance Committee for their consideration and report. The name of the donor of the sum of £30,000 must, for the present, remain unknown, but it may be stated that it is a person with a keen interest in architecture who desires "to see the completion of one of the most beautiful buildings in London." The new buildings are to be erected at the north-west of the present building. The Senate of the University will, it is expected, be in a position to proceed with the work as soon as the two committees have formally dealt with the subject. The new buildings will be in keeping with the existing main block, and will occupy a site slightly recessed from, but on the frontage of, Gower Street. With the new chemical laboratories, which are to be built on the north side of the University College property, the premises will form a very important and extensive block.

#### New Scheme of Art Education.

With the approval of the Standing Committee of Advice for Education in Art, the Board of Education have drawn up a scheme for the revision of the existing arrangements for examinations in art and for the issue of teaching certificates for teachers of art, to come into force in 1913. It is hoped that detailed syllabuses, together with full regulations, will be ready for issue at an early date in the coming year. Under the new scheme (which is described in Circular 786) it will be possible for a teaching certificate to be obtained after a course of studies in art, covering some five or six years and terminating at the age of 21 or later, according to the time actually devoted to the course and the age at which the candidate left a secondary school or other place of general education. In recommending the adoption

of the scheme, the Standing Committee pointed out that it does not preclude the desirability of a more advanced course (analogous to what is known as a "post-graduate" course in University work) at the Royal College of Art or elsewhere for candidates for headmasterships and the higher positions on the teaching staffs of schools of art. The Board consider that such a course might in many cases be taken with advantage, and are further of opinion that those in whose hands the appointment of teachers rests will tend more and more to require, in addition to such qualifications as can be tested by examination, some evidence of the actual and successful practice of some branch of fine or applied art.

#### Town Expansion and Open Spaces.

In an article under the above heading in *The Times* of the 14th inst., it is pointed out that by what may at first sight seem a curiously paradoxical law the provision of open spaces in Central London tends to make the need for them acuter on the outer fringe. Some of the most crowded London areas, as well as some of the most central and convenient, have been turned in recent years into some of the emptiest; and the Londoner who returned to-day from a twenty years' sojourn abroad would probably be as greatly struck by the denudation of a considerable slice of Bloomsbury, overlooked by the new wing of the British Museum now nearing completion, as by the substitution of a railway terminus and its approaches for most of the once notorious slum area of Lisson Grove, or the transformation of the squalid alleys of Clare Market into a region embellished with spacious highways and a new opera-house. But the displaced population must find a home somewhere, and the disturbance caused by its migration is felt far beyond the districts immediately affected. The outward wave from Central London meets the inwash of the steady tide from the country, and the united volume distributes itself over a network of loosely-knit suburbs which are rapidly extending to a distance of thirty or forty miles from Charing Cross. It is as urgent a matter to preserve the best of the existing open spaces in what are still generally regarded as the outer suburbs, or even the open country, as to provide new ones in the densest quarters of East and South London. Fortunately, the necessity is being realised, though not sufficiently rapidly in all quarters to keep pace with the advance of building. *The Times* article emphasises the need of care and foresight to retain as far as possible the best natural features in the country for the refreshment of coming generations. Careful preservation of such features is the root principle of the most intelligent schemes of town-planning; and every new suburb ought to be laid out so as to make the most of such attractive objects as old trees, or distant views, or clear pools and streams. While the scope of garden cities and town-planning schemes is not small, the whole face



of the country in the neighbourhood of every growing centre of population should be safeguarded from merely wanton defacement, and made available as far and as long as possible for public recreation and enjoyment. Obviously no one body, however authoritative, can control so wide a field; and the realisation of this ideal of civic development must depend upon the enlightened sense of the whole community. Though the widest opportunity lies naturally with those who own land, or are able to buy it and dedicate it to the use of the public, the poorest as well as the richest can exercise a powerful influence upon the utilisation of any tract of country to the widest public advantage. The readiness of landowners to grant public access to their land depends to a very great extent on the way in which the public behave when admitted; and the best provocative of generosity is a proved capacity for intelligent and orderly appreciation, such as is conspicuous in the attitude of the populace towards the London parks.

#### The Aldwych Site: Proposed Australian Government Offices.

The House of Representatives, and subsequently the Senate of the Australian Commonwealth, have approved the decision of the Federal Government to purchase the freehold of the eastern portion of the Strand-Aldwych site. It is proposed to erect upon the site a building for the official headquarters of the Commonwealth, and probably also of some of the Australian States and possibly New Zealand. The cost of the building is estimated at £223,000, and the amount to be paid to the London County Council for the freehold site is £364,000.

Sir George Reid, the High Commissioner for Australia, states that the Commonwealth Government propose to give the Australian States the opportunity, if they should desire it, of having the offices of their Agents-General upon the Strand-Aldwych site. The State of Victoria has already built offices on the south-western portion of the land; the building which is about to be erected will occupy the remainder of the site, and have a frontage to the Strand, Aldwych, and Melbourne Place of 624 feet. There will be eight stories, including the basement and the ground floor; and there will be three main entrances in the thoroughfares mentioned. At the eastern corner of the building, opposite the Gladstone statue, there will be another entrance, leading into the exhibition hall. The exterior of the building will be Renaissance in character, and will be faced with Portland stone. Along the Strand and the Aldwych frontages there will be balconies and colonnades. The dome upon the present Victoria building will be reproduced upon the eastern portion of the new building. There is a bronze figure of Progress, by Mr. F. W. Pomeroy, A.R.A., upon the existing dome, and probably a similar figure will be placed upon the new dome. The exhibition hall, to which the eastern entrance will give access, is to occupy nearly

the whole of the ground-floor level. It will be lighted partly by two large glass domes in the middle of the block. This hall will have an area of 12,300 square feet, and the floor and columns will be of Australian marble. The hall will be used for the purpose of displaying the natural products of the various Australian States. The building will also contain, on an upper floor, a lecture hall, reception hall, and library, 3,500 square feet in extent. The remainder of the building will be occupied by the offices of the High Commissioner for Australia and of the various Australian Agents-General, and by business firms interested in the Australian trade. Mr. A. Burr [F.] is the architect.

#### Victoria and Albert Museum: Recent Acquisitions.

The following are among the more important examples of old English furniture which have been recently acquired by the Victoria and Albert Museum:—

To the collection of English Gothic woodwork has been added a portion of a rood screen of oak, still bearing traces of its original colour. It dates from the late 14th or early 15th century, and the western front of the screen, of which this portion formed the eastern, is still *in situ* in Tilbrook Church, Bedfordshire.

The examples of Tudor furniture in Room 6 have been increased by the acquisition of four finely carved bed-posts of the time of Henry VIII., and those of the Elizabethan period in Room 52 by a writing desk elaborately inlaid with architectural designs of the type commonly known as "Nonesuch" from their resemblance to the façade of the palace of that name built by Henry VIII.

The additions to the walnut furniture of the 17th century comprise a Cromwellian armchair, several Charles II. chairs, including one very elaborate example, and a chair of rare form intended for the use of a child (Room 54).

Several important examples have been added to the collection of marquetry furniture of the time of William and Mary in Room 55. Amongst these is a chest of drawers, with cabinet above, dated 1688.

To about 1700 may be attributed a recently acquired complete upholstered bedstead with curtains and canopy, from Welford-on-Avon, and a corner cupboard or buffet of carved pine bearing the arms of Hicks, lately removed from an old house in Bristol. The latter of these two objects is to be seen in Room 56; the former is being prepared for exhibition.

To the collection of 18th century clocks in Rooms 55 and 56 have been added two so-called "grandfather" clocks in dark-green English lacquer, both bought in Spain, one of which was given to the Museum by Mr. L. Harris; a similar tall case clock, of later date, in inlaid mahogany of Lancashire make, given by Mr. Emile S. Mond; and a bracket clock of mahogany and olive wood.

The rare furniture of the early Georgian period,

previously almost unrepresented in the Museum, is now illustrated by a choice carved and gilt mirror, the gift of Sir Edward Stern. This mirror closely follows the style of the well-known architect and designer William Kent, and was probably designed by him for Frederick, Prince of Wales. It is exhibited in Room 56.

The chief addition to the furniture in the Chippendale manner consists of an historical chair, being the President's Chair of Lyon's Inn, one of the old Inns of Chancery, the buildings of which dated from the early part of the 18th century and were destroyed in 1862. This important example of mid-18th century woodwork will shortly be placed on exhibition.

### THE AUTUMN EXAMINATIONS.

#### Preliminary.

The Preliminary Examination, qualifying for registration as *Probationer R.I.B.A.*, was held in London and the provincial centres mentioned below on the 20th and 21st November. The Board of Architectural Education, reporting the results to the Council, state that, of the 95 candidates admitted, 37 were exempted from sitting, and the remaining 58 were examined, with the following results:—

Centre	Total examined	Passed	Relegated
London . . .	40	27	13
Bristol . . .	7	6	1
Leeds . . .	3	2	1
Manchester . .	6	5	1
Newcastle . .	2	2	0
	58	42	16

The passed candidates, with those exempted, making a total all together of 79, have been registered as Probationers, and are as follows:—

ALLUM: Stanley Charles; 24 Chichester Road, Westbourne Square, Paddington, W.  
 ANDREW: Harry; 56 Whitefriargate, Hull.  
 ATKIN-BERRY: Henry Gordon; 23 Old Broad Street, E.C.  
 BARLEY: Francis Alfred; 10 Canewdon Road, Westcliff-on-Sea, Essex.  
 BARLOW: Smith; "Holly House," 103 Edgeley Road, Stockport, Cheshire.  
 BISIKER: Arthur Milton; 60 Crouch Hall Road, Crouch End, N.  
 BLACKPOOL: Joseph; Dunclent, near Kidderminster.  
 BOWMAN: Arthur William; 31 Roland Gardens, S.W.  
 BRADSHAW: George; Moss View, Chain Bar, Failsworth, Manchester.  
 BRADSHAW: Harold Chatton; 30 Heathfield Road, Wavertree, Liverpool.  
 BRINKWORTH: Edwin Aubrey; Stowell Farm, Corsam, Wiltshire.  
 BROOKS: Christopher John; 1 Bessborough Gardens, S.W.  
 BRUETON: Bertrand Frederick; North Petherton, Bridgwater, Somerset.  
 BURGORD: James; Woodlands, Gresham's School, Holt, Norfolk.

CALDWELL: Wilfrid; "Elmsdale," Penzance.  
 CAMERON: Allan George; Heath Mount, South Side Road, Inverness, N.B.  
 CARRERAS: Louis Ernest; 48 Wellington Road, St. John's Wood, N.W.  
 COOPER: Carilef Miles; 27 St. Mark's Crescent, Regent's Park, N.W.  
 COOPER: James Gough; 52 Gowan Road, Willesden Green.  
 CROSSLEY: George; 117 Upper Woodlands Road, Bradford, Yorkshire.  
 CROWTHER: Joseph Hawkyard; 42 Huddersfield Road, Elland.  
 CURTIS: Herbert Lewis; 2 Anson Road, Tufnell Park, N.  
 DANGERFIELD: Paul; "Westcott," Battlefield Road, St. Albans.  
 DREW: Stanley Thomas; "Mayfield," Grove Park, Kent.  
 EVANS: Frederick Hardcastle; "Gwenfred," College Road, Moseley, Birmingham.  
 FEIRN: John Laurence; Rose Cottage, Windermere.  
 FORBES: William Alexander Stanhope; Higher Faugan, Newlyn, Penzance, Cornwall.  
 FOSTER: Kimberley George; The Globe, Euckfastleigh, South Devon.  
 FRAME: Robert; Maryville, Larkhall, Scotland.  
 GOSSLING: Hugh Foley; Annandale, 15 Birdhurst Road, South Croydon.  
 GRAY: Andrew; 64 Duncombe Road, Hertford.  
 GUTTERIDGE: Richard Howard; 44 Bernard Street, Russell Square, W.C.  
 HARRIS: Wilfred Henry; 33 Sydney Road, Stoke Newington, N.  
 HARRISON: Harry St. John; 102 Holly Avenue, Jesmond, Newcastle-on-Tyne.  
 HITCH: John Oliver Brook; 60 Harleyford Road, Vauxhall, S.W.  
 HUNT: Reginald; "The Homestead," Sunningwell Road, Oxford.  
 HUSTLER: Colonel Bedford; 18 Church Street, Castleford, Yorks.  
 JACKSON: Robert Dunnett; 16 Fairview Road, Oxton, Cheshire.  
 JACOB: John Henry; The Close, Salisbury.  
 JEFFREYS: Harold Murton; 127 High Street, Maldon, Essex.  
 JEYNES: Herbert Jesse; 149 Winson Green Road, Birmingham.  
 JOHNSON: Campbell MacAlpine Cameron; Monteith, Stroud Green, Gloucester.  
 JOHNSON: Henry Andrew; c/o J. H. Woodhouse, Esq., Singleton Lodge, Heaton Moor, Manchester.  
 KEY: William Donald; "Glen Caladh," Upminster, Essex.  
 LANGDELL: George Arthur; 173 Vauxhall Bridge Road, S.W.  
 MACBEAN: Ian B.; 7 Leopold Road, Ealing Common, W.  
 MACPHERSON: Hugh; 94 Battlefield Road, Langside, Glasgow.  
 MARNER: George Lionel Stuart; Architects' Dept., Metropolitan Asylums Board, Victoria Embankment, E.C.  
 MARTYN: Egerton Alwyn Lawer; Brynhyfryd, Albany Road, Redruth, Cornwall.  
 MERCER: John Frederick Lees; 11 Park Mount, Revidge, Blackburn.  
 MILNES: Frank; 79 Hillhouse Lane, Huddersfield, Yorks.  
 MOERDIJK: Gerard; 10 Watford Villas, Battersea Park, S.W.

MOSLEY : Arthur Roy; c/o Messrs. Spurrell & Murray, 24 Gildridge Road, Eastbourne.  
 OMAR : Ismail; 59 Parliament Hill, Hampstead, N.W.  
 PALMER : Arthur James; 12 Lady Margaret Road, N.W.  
 PAUL : Henry, Junr.; 141 South Ealing Road, Ealing, W.  
 PITE : Robert William; 13 Elm Grove Road, Ealing, W.  
 POWELL : Frank Howard Newman; Sea Lodge, West Hill Road, Bournemouth.  
 PYE : James Frederick; Lindum House, Hainton Avenue, Grimsby.  
 REMEDIOS : Ricardo Maria dos; 26 Portsdown Road, Maida Vale, W.  
 RIX : Alec Donald; Norwich High School for Boys, St. Giles' Gates, Norwich.  
 ROBINSON : John Joseph; 39 Montpelier Road, Kentish Town, N.W.  
 ROGERS : John Raymond; c/o Messrs. Quick & Lee, 11 Waterloo Place, Leamington Spa.  
 ROUTLEY : Leonard James; 17 Cleveland Street, Taunton.  
 RUDMAN : Walter; 23 New Road, Chippenham, Wilts.  
 SHACKLETON : Frederick Harry; 33 Cobden Street, Luton, Bedfordshire.  
 SHIBLEY : Albert Reginald; 5 Mina Road, Merton Park, Surrey.  
 SMITH : Charles Harold Norman; 2 Cromer College, Norfolk.  
 SPURWAY : George Vyvyan; Ford Bridge, Milverton, Somerset.  
 STANLEY : Leslie Stuart; "Kylmore," Chesterton Road, Cambridge.  
 TANNER : Edgar Allan Davey; 18 Hestercombe Avenue, Munster Road, Fulham, S.W.  
 THOMAS : David Reece; Bryncastell, Llangadock, South Wales.  
 THOMAS : Harry Morgan; 80 Holland Road, Maidstone.  
 THOMSON : John Stewart; 12 Salisbury Road, Wimbledon, S.W.  
 TUNNARD : Henry Bartholomew; 156 Denmark Hill, S.E.  
 WAGER : Frank; Aston Cross, Birmingham.  
 WALKER : Stewart Edgar; c/o Messrs. Walsh and Nicholas, 10 Harrison Road, Halifax.  
 WILLIAMS : Llewellyn Edwin; Ingram House, Stockwell, S.W.  
 WILLIAMS : Percy James; "Carne," Carmarthen.

#### Intermediate.

The Intermediate Examination, qualifying for registration as *Student R.I.B.A.*, was held in London and the undermentioned provincial centres on the 20th, 21st, 23rd, and 24th November. The Board of Architectural Education report to the Council that 100 candidates were admitted and examined, with the following results:—

Centre	Total examined	Passed	Relegated
London . . .	59	36	23
Bristol . . .	8	5	3
Leeds . . .	5	2	3
Manchester . .	23	14	9
Newcastle . .	5	3	2
	100	60	40

The successful candidates, who have been registered as Students, are as follows, their names being given in order of merit as placed by the Examiners:—

BENNETT : Thomas Penbertley [P. 1910]; 46 Cambridge Avenue, Kilburn, N.W.  
 THOMAS : William Norman [P. 1909]; 236 Nantwich Road, Crewe.  
 NEWTON : William Godfrey [P. 1909]; 40 Ladbroke Square, W.  
 LORNE : Francis [P. 1906]; 44 Torrington Square, W.C.  
 HOFER : Max Richard [P. 1909]; St. Catherine's Lane, Eastcote, Middlesex.  
 ROBERTSON : Manning Durdin [P. 1910]; 36 Bedford Square, W.C.  
 MACKENZIE : Kenneth Beaumont [P. 1908]; c/o Harry Redfern, Esq., 5 Bedford Row, W.C.  
 DUBINS : Louis Gabriel Alfred [P. 1910]; 28 High Street, Eccleston Square, S.W.  
 WOODROFFE : Norman Frederic [P. 1909]; Chesney Wold, Purley Downs, Surrey.  
 ROWNTREE : Colin [P. 1908]; 11 Hammersmith Terrace, W.  
 LAIT : Leonard Harry [P. 1909]; 44 Rylett Crescent, Ravenscourt Park, W.  
 EBBS : Edward Harold Montague [P. 1905]; 11 Greenhill Road, Harlesden, N.W.  
 HINTON : John Garfield [P. 1905]; 36 Upper High Street, Winchester.  
 WALTER : Robert Albert [P. 1904]; 46 Cavendish Road, Harringay, N.  
 ELGAR : William Henry; 48 Watkin Road, Folkestone.  
 FRISCOTT : Harris Stephens [P. 1909]; 42 Hill Park Crescent, Plymouth.  
 MOERDIJK : Gerard [P. 1911]; 10 Watford Villas, Battersea Park, S.W.  
 TAYLOR : Rowland Victor [P. 1908]; 25 Curzon Road, Southport.  
 WILLIAMSON : Fred [P. 1910]; "Lynton House," Rushford Avenue, Levenshulme, Manchester.  
 GOLD : Hugh Andrew [P. 1908]; Cosford, The Avenue, Beckenham, Kent.  
 HARLAND : Norman Gregory [P. 1909]; 85 Moundfield Road, Stamford Hill, N.  
 HILL : Claude Edgar [P. 1907]; 35 Collegiate Crescent, Sheffield.  
 CHEADLE : John Oscar [P. 1911]; 11 Campden House Road, Kensington, W.  
 HART : Edmund John [P. 1910]; 9 Bank Street, Salford, Manchester.  
 PIDSLEY : Wilfrid Gould [P. 1910]; Sand Rock House, Pinhoe, Devon.  
 RUDHALL : Percy William Graham [P. 1902]; 22 Belsize Park Gardens, N.W.  
 HEMM : Gordon [P. 1909]; Fenn Lea, 16 Manchester Road, Heaton Chapel, near Stockport.  
 ROBERTSON : Godfrey Alan Keith [P. 1907]; Ard-nacoragh, Hughenden Avenue, Belfast.  
 CLARK : Charles James Kilgour [P. 1907]; 80 Brighton Grove, Newcastle-on-Tyne.  
 BOTHWELL : Edwin Forbes [P. 1908]; 211 Romford Road, Forest Gate, Essex.  
 BROADHEAD : Frank Arthur [P. 1909]; 31 Douglas Road, Nottingham.  
 CLARK : Sidney [P. 1906]; 3 Howard Place, Carlisle.  
 EDWARDS : Arthur Trystan [P. 1908]; 65 Huskisson Street, Falkner Square, Liverpool.  
 GARRETT : Sidney Colston [P. 1906]; 14 Windlesham Road, Brighton, Sussex.

- GRICE: William Stanley [*P.* 1911]; Chapel House, Mattock Lane, Ealing, W.
- HARWOOD: Arnold William [*P.* 1905]; 17 Pall Mall East, S.W.
- JACKSON: Burrough de Carle [*P.* 1907]; Chelston, Overberry Avenue, Beckenham.
- LEWIS: William John [*P.* 1903]; Dryslwyn, The Parade, Pontypridd.
- MADDOCK: Richard Henry [*P.* 1908]; "Tremadoc," Egmont Road, Sutton, Surrey.
- MATTHEWS: Ralph Edward [*P.* 1906]; "Elmcroft," Holyhead Road, Coventry.
- McLEAN: George [*P.* 1909]; Bank Place, Portmadoc, North Wales.
- MOUNTFORD: Edward Wallis [*P.* 1907]; The Hill, Guildown, Guildford.
- NICHOLS: Charles Edwin [*P.* 1908]; Rectory Farm, Eckington, Sheffield.
- NORRIS: Ernest Bower [*P.* 1907]; Rosemere, Clayton, Avenue, Didsbury.
- PALMER: James [*P.* 1907]; 130 Balls Pond Road, Islington, N.
- PARKIN: William Gordon [*P.* 1911]; 30 Carlingford Road, Hampstead, N.W.
- RILEY: Richard Holden [*P.* 1905]; "The Sycamores," Lower Darwen, near Darwen.
- SILCOCK: Arnold [*P.* 1909]; 26 Green Park, Bath.
- SMITH: Thomas Harold [*P.* 1908]; 108 Davenport Street, Bolton, Lancs.
- SUNTER: Michael Calvert [*P.* 1904]; "Klemlea," Holland Road, Chorlton-cum-Hardy, Manchester.
- TOONE: Aubrey Alfred Gifford [*P.* 1906]; 228 Plymouth Grove, C.-on-M., Manchester.
- WEST: Archibald John [*P.* 1909]; 150 Birkin Avenue, Nottingham.
- WHITE: Percy Gordon [*P.* 1902]; Caerlaverock, Bickley Road, Bickley, Kent.
- WIGGINS: Jack Stanley [*P.* 1907]; 3 Eaton Place, Brighton.
- WILLIAMS: John Gerrard [*P.* 1909]; 103 Clifton Hill, St. John's Wood, N.W.
- WILLIAMS: William John Vaughan [*P.* 1910]; Brookfield House, Llansamlet, Swansea.
- WILSDON: Percy Thomas [*P.* 1907]; 36 Fanholme Road, West Kensington, S.W.
- WINDER: Arthur Mayall [*P.* 1909]; 254 Waterloo Street, Oldham, Lancs.
- WOODHOUSE: Brian William [*P.* 1905]; 15 Chatsworth Square, Carlisle.
- YETTS: Lawrence Muskett, B.A. [*P.* 1911]; 45 Finsbury Pavement, E.C.
- BARRY: Francis Renton, jun. [*P.* 1905]; "Inchgarth," Kew Road, Richmond, Surrey [Architectural Association School].
- CARRERAS: Louis Ernest [*P.* 1908]; 48 Wellington Road, St. John's Wood, N.W. [Division of Architecture, King's College].
- HUGHES: Vernon Hugh [*P.* 1907]; "Corunna," Sandgate, Kent [School of Architecture, Liverpool University].
- OMAR: Ismail; 59 Parliament Hill, Hampstead, N.W. [School of Architecture, University College].
- WEBB: Philip Edward [*P.* 1906]; 1 Hanover Terrace, Ladbroke Square, W. [Architectural Assoc. School].
- WILLIAMS: Llewellyn Edwin; Ingram House, Stockwell, S.W. [Division of Architecture, King's College].

### Final and Special.

The Final and Special Examinations qualifying for candidature as Associate R.I.B.A. were held in London from the 30th November to the 8th December. The Board of Architectural Education report to the Council that of the 99 candidates admitted and examined, 56 passed and the remaining 43 were relegated to their studies. The passed candidates, who, subject to Clause 8 of the Charter, have become qualified for candidature, are as follow, the \* prefixed to a name indicating that the candidate sat for the Special Examination, which is designed for architects in practice and chief assistants exempted by the Council from the Preliminary and Intermediate Examinations and from submitting Testimonies of Study:—

ARCHER: Herbert Humbley [*S.* 1910]; The Cottage, 13 High Street, Windsor.

BAREFOOT: Herbert John Leslie [*S.* 1909]; 13 Wexford Road, Wandsworth Common, S.W.

BARGMAN: Robert Frederick [*S.* 1906]; 76 South Street, Dorking.

\*BAXTER: James Alexander Manson [*Special*]; 7 Brougham Place, Edinburgh.

BENNETT: Thorold [*S.* 1907]; 36 Darnley Road, Gravesend.

BESANT: Hubert Saxton [*S.* 1908]; 75 Burnt Ash Road, Lee, Kent.

BRITTAN: Harold William [*S.* 1910]; 146 St. James' Road, Croydon.

\*CASTELOW: Charlie [*Special*]; Forest Hill, Roundhay, Leeds.

CLARKE: John Moulding [*S.* 1909]; "Brentwood," Fulwood, Preston.

COWDELL: Charles Joseph Morton [*S.* 1908]; "Sunny side," Springfield Road, Leicester.

CROUCH: Frederick Alfred [*S.* 1910]; 75 Portland Road, Hove, Brighton.

\*CULLEN: David Stearer [*Special*]; 47 Edith Road, South Norwood.

DOVASTON: John [*S.* 1905]; 14 Madeley Road, Edling, W.

DOWDESWELL: Frank [*S.* 1908]; Trevone, Grove lands Road, Palmer's Green, N.

DUNN: Gerald Morton [*S.* 1904]; 1 and 2 Bucklersbury, Cheapside, E.C.

DURRANT: Arthur Michael [*S.* 1908]; Leverstock Green, Hemel Hempstead, Herts.

EDWARDS: Sidney James [*S.* 1910]; 3 Powis Square, Bayswater, W.

GROUND: John Kingston [*S.* 1907]; 13 Hart Street, Bloomsbury, W.C.

HEALING: John Burton [*S.* 1906]; 11 Abingdon Road, Leicester.

The following table shows the number of failures in each subject of the Intermediate Examination:—

I. Classic Architecture . . . . .	18
II. Mediæval Architecture . . . . .	27
III. Renaissance Architecture . . . . .	34
IV. General Questions . . . . .	20
V. Theoretical Construction . . . . .	18
VI. Descriptive Geometry . . . . .	20
VII. Applied Construction . . . . .	17

### Intermediate Exemptions.

The following candidates, having produced, in accordance with the regulations, satisfactory evidence of previous training, were exempted from sitting for the Intermediate Examination, and have been registered as Students R.I.B.A.—viz.

HEPWORTH: Philip Dalton [S. 1910]; "Cahirdown," Holford Road, Hampstead Heath, N.W.  
 JOHNSTON: Bruce [S. 1909]; 90 Windermere Road, South Ealing, W.  
 \*KNEWTUBB: Joseph John [Special]; Brackenbar, Graham Street, Penrith, Cumberland.  
 \*LARSEN: Arthur Wilhelm [Special Colonial]; "Carleton," Hartington Road, Grove Park, W.  
 LAY: Cecil Howard [S. 1909]; 20 Willoughby Road, Hampstead, N.W.  
 LENTON: Frederick James [S. 1909]; 18 High Street, Stamford.  
 LING: Richard Bertram [S. 1905]; 119 West Side, Clapham Common, S.W.  
 \*LOVELL: Richard Goulburn [Special]; St. Moritz, Upper Avenue, Eastbourne, Sussex.  
 MARTIN: Henry Ray [S. 1908]; 137 Burnt Ash Road, Lee, S.E.  
 MEIKLEHAM: David Lang [S. 1907]; "Osborne," Woodstock Avenue, Golders Green, N.W.  
 MORLEY: Francis Henry [S. 1907]; c/o B. W. Thorneley, Esq., Royal Liver Building, Liverpool.  
 MOSS: Harold Edward [S. 1911]; Rutland House, Kingston-on-Thames.  
 NICHOLSON: Frederick William [S. 1909]; 20 Preston Grove, Anfield, Liverpool.  
 \*NICOL: Robert Dewar [Special]; P.O. Box 197, Calcutta, India.  
 ORRISH: Roland [S. 1908]; 1 Bailey Street, Derby.  
 OWEN: Geoffrey [S. 1908]; 20 Queen Square, W.C.  
 \*OXLEY: Wilfred Benjamin [Special]; Education Department, Town Hall, Leicester.  
 PAGE: John [S. 1908]; Binham, Hadley Grove, Barnet, Herts.  
 PHILLIPS: Arthur Todd [S. 1910]; Llanoley, Harpenden, Herts.  
 ROBINSON: Harold Graham Fector [S. 1910]; 12 Lawn Road, Hampstead, N.W.  
 RUSSELL: Andrew Lawrence Noel [S. 1911]; 292 Lancaster Road, W.  
 SELWAY: Edward Ralph Douglas [S. 1909]; 38 Grafton Square, Clapham, S.W.  
 SHEARS: Reginald [S. 1909]; 38 Anerley Road, West-cliff-on-Sea, Essex.  
 SINCLAIR: William Braxton [S. 1904]; Lynton, Bexley, Kent.  
 SOUSTER: Charles Leslie [S. 1907]; 18 Eastdown Park, Lee, S.E.  
 STEDMAN: William Bernard [S. 1908]; 22 Bushey Road, Harlington, Middlesex.  
 \*STEWART: Harry Sinclair [Special]; 6 Bloomsbury Square, W.C.  
 STOCKTON: Russell [S. 1906]; 43 Didsbury Road, Stockport.  
 \*SWASH: Frank Stanley [Special]; The Mount, Llandrindod Wells, Wales.  
 VOYSEY: Charles, junr. [S. 1909]; 23 York Place, Baker Street, W.  
 \*WELFORD: Arthur [Special]; 13 Hart Street, Bloomsbury Square, W.C.  
 WHITE: Charles Herbert [S. 1905]; 9 Shadwell Road, Bishopston, Bristol.  
 WHITEHEAD: Thomas Gustavus [S. 1909]; 10 Dunheved Road North, Croydon, S.W.  
 WHYMPER: William [S. 1908]; 10 Gray's Inn Square, W.C.  
 WILCOCKS: Conrad Birdwood [S. 1907]; Willstead, Caversham Heights, Oxon.  
 WORTHINGTON: John Hubert [S. 1911]; Broomfield, Alderley Edge, Cheshire.  
 \*WYLD: Robert Stodart Baggarnie [Special]; 31 Bedford Row, W.C.

The following table shows the number of failures

in each subject of the Final and Special Examination:—

I. Design . . . . .	31
II. The Principles of Architecture . . . . .	24
III. Building Materials . . . . .	11
IV. Principles of Hygiene . . . . .	25
V. Specifications . . . . .	18
VI. Construction—Foundations, etc. . . . .	31
VII. Construction—Iron and Steel, etc. . . . .	30

#### Ashpitel Prize, 1911.

The Board of Architectural Education recommend the Council to award the Ashpitel Prize for 1911 to Mr. Philip Dalton Hepworth [P. 1907, S. 1910] of "Cahirdown," Holford Road, Hampstead Heath, who passed the Final Examination above referred to, he being the candidate who has most highly distinguished himself in the Examinations held during the current year.

#### ALLIED SOCIETIES.

**The Liverpool Architectural Society.**—The Opening Address of the Session was delivered on 6th November by Mr. Arnold Thornely [F.], *President*, in the course of which he said:—

There is an undoubted tendency as our Secretaries could tell you) towards greater intercommunication between the Society and the Institute, and a desire on the part of the latter to call in the aid of the Allied Societies in much of its work. As instances of this may be mentioned the numerous meetings held in different parts of the country for the enrolment of Licentiates, and the assistance given by the Allied Societies in connection with the revised Regulations for Competitions. Quite recently our Council has been asked and has consented to undertake the examination of designs which may be submitted as an alternative to the usual testimonies of studies asked for in the Final Examination.\* . . .

The revision of the Schedule of Professional Charges is now occupying the attention of the Institute. This subject has been under consideration for some time past, as it has been felt that not only might the Schedule of Charges itself be improved but that a clearer description of the architect's duties and responsibilities might with advantage be included to enable a client to realise exactly what he would get and what he would not get when employing an architect. A Special Committee of the Institute has gone exhaustively into this matter during the past twelve months, and the Council has recently forwarded their proposals to the Council of this and other Allied Societies with a request for their criticisms and suggestions. I trust that when issued by the R.I.B.A. in its final form it will be found by members to be an improvement upon the old basis. In my opinion it is most desirable that there should be no ambiguity as to the fees that an architect is entitled to charge for work of a minor character, and that such fees should be on a basis generally accepted by the public. The existing schedule is not at all clear on such matters, and as I think we are all agreed that five per cent. is, often enough, anything but adequate remuneration, a new schedule should put an end to any misunderstandings.

\* See R.I.B.A. Calendar 1911-12, p. 475.



Whilst on this question of fees it seems to me that the time is now ripe for the amount of commission chargeable for quantities to be put on a definite basis. I am afraid it is doubtful whether the Institute will see its way to embody these in their new schedule by reason of the fact that the quantities are not usually in London considered part and parcel of the architect's work. So many provincial architects are, however, responsible for their own that the question becomes a pressing one, and particularly so as I believe the Quantity Surveyors' Association have not so far seen their way to formulate a definite schedule.

I particularly refer to this because I see that various public bodies have recently advertised for quotations from surveyors, and evidently adopted the principle of accepting the lowest. This in one case amounted to one and a half per cent. on the cost of the projected work, and I believe offers of one-half per cent. have actually been received. If such a system is to become general a serious difficulty is at once presented. If the idea once gets abroad that reliable quantities can be obtained for the outlay I have mentioned, it will be only a short step for such a percentage to become the generally accepted rate, and quotations might even then be asked for on the chance of obtaining a still lower scale.

Mr. Thornely then called attention to the various legal decisions during the past year which have added so largely to the architect's responsibilities, singling out for special mention the dry-rot cases and the case of the *Crittall Manufacturing Co. v. London County Council*. As a result of the judgment in the latter case, he said, it becomes clear that when an architect nominates a specialist and requests the contractor to employ him, and he is declared by the conditions of contract to be employed by the contractor, he (the contractor) is at the same time merely an agent acting on behalf of the building owner; and further, should the contractor fail to pay to his sub-contractor any sums of money included in the architect's certificates for that purpose, the building owner is liable to have to pay a second time. I have the greatest sympathy with any sub-contractor who having done his work fails to get paid for it owing to the bankruptcy of the general contractor, but I cannot see that he should have preferential treatment over any other person from whom the contractor may have purchased goods. He enters into the contract knowing to whom he is to look for payment, and in doing so must be prepared to take the risk (if any) of not being paid, as other people have to. One or two different ways of dealing with the difficulty have been suggested: (1) To insert a clause in the contract providing that no sums of money due to specialists will be included in any certificate to the contractor until he has paid the specialists and produces receipted accounts in respect of same, and also providing that in the event of the contractor failing to pay the specialists within a certain time, the building owner shall have power to pay the specialists direct. (2) To arrange for all specialists to be paid direct by the building owner upon production of a certificate from the architect. This latter suggestion would do away to a large extent with the advantages derived from having a sole contractor who is responsible for the whole of the work, and would also give the building owner considerably more trouble than he would willingly undertake. The whole question of the sub-contractor's position in relation to the general building contract becomes in fact one of increasing difficulty, and particularly so now that

the introduction of numerous specialists is such a usual feature in a building of any magnitude.

The cases I have mentioned are of such importance to architects, particularly those concerning dry rot, that I hope and trust the Institute will seriously take the matter in hand, and, if possible, provide some means of protection for its members. It is, I believe, pretty well agreed among those well qualified to speak that there is much more difficulty in obtaining sound and well-seasoned timber at the present time than used to be the case, and as a consequence dry rot has become more prevalent. Under these circumstances it seems to me to be only reasonable that architects who have exercised reasonable care and skill in the construction of their buildings should not be held responsible in the event of dry rot occurring in them. Various methods of overcoming the difficulty have been suggested, some of which are as follows:—(1) Architects to contract out of it when settling the terms of their appointment with their clients. This would be likely to cause such unnecessary alarm as to give their clients many sleepless nights. (2) For building owners to insure against it, the cost being provided for in the building contract for a period of, say, six years. (3) The building contract to provide for a maintenance period of six years. To this proposal the builder might take exception. But whatever the remedy, a remedy must be found.

Passing to subjects of local interest, Mr. Thornely said:—

For several weeks during last winter a great discussion raged over the propriety of erecting an equestrian statue as a memorial to King Edward VII. at the south end of St. George's Hall. The question was entirely concerned with the architectural fitness of the idea, and whether it were possible satisfactorily to erect a statue in that position. The local press opened its columns for the discussion of the subject, the architectural papers throughout the country had leading articles upon it, the Royal Institute of British Architects passed a resolution condemning the proposal, and this Society took its share in offering a strong protest. I think it may be said without fear of contradiction that the more the idea of tampering with the architectural composition of this end of St. George's Hall was discussed the more apparent it became that to do so would be fraught with the greatest danger. The architectural profession was almost unanimously opposed to the suggestion. Since that discussion ceased many months have elapsed, and so far as I am aware no information has been vouchsafed to the public as to what decision (if any) the Memorial Committee has come to. I can only express the hope that, taking into consideration the very large amount of criticism the scheme has provoked, the Committee will abandon it entirely and look for some other site in the City which will meet with more general approval. Many possible sites have been discussed and each one has had its supporters and objectors. To me, a site at the Pier Head appears to have unrivalled claims for such a monument—but before any definite position could be assigned to it, much thought should be expended in the preparation of a scheme for ultimately dealing with the whole of the Pier Head area of which the monument might form a part. It must be a matter of regret to all who have at heart the architectural amenities of the city, that when some years ago the Georges Dock site became ripe for development, town planning as now understood did not receive the attention it deserved. As a consequence,

the only question which then appears to have been considered was the width and direction of the streets forming the approach to the Pier Head across the Georges Dock. The occasion provided a favourable opportunity for laying down a scheme dealing with the treatment of the whole of the Pier Head area, including the landing stage approaches. Why should not a comprehensive scheme of this character be *now* taken in hand as a memorial to our late King? I believe that if the citizens of Liverpool fully realised the architectural possibilities and the vast improvement it would effect, there would be no great difficulty in obtaining the funds necessary for its execution.

Mr. Thornely referred to "The Art Commission of the City of New York," which was founded in the year 1901, and quoted Section 637 of its charter which enacts that:—"Hereafter no work of art shall become the property of the City of New York by purchase, gift, or otherwise, unless such work of art or a design of the same, together with the proposed location of such work of art, shall have first been submitted to and approved by the Commission; nor shall such work of art until approved be contracted for, erected, or placed in or upon any public building, or other public place belonging to the City. No existing work of art in the possession of the City shall be removed, re-located, or altered in any way without the similar approval of the Commission. The Commission shall act in a similar capacity with similar powers in respect of the designs of buildings, bridges, approaches, gates, fences, lamps, or other structures erected or to be erected upon land belonging to the City, and in respect to the lines, grades, and plotting of public ways and grounds, and in respect of arches, bridges, structures, and approaches which are the property of any corporation or private individual, and which shall extend over or upon any street or public place belonging to the City." What beneficial control such a commission might exercise over the development of a large city! I hope the day is not far distant when the citizens of Liverpool, awakening to a fuller appreciation of the beautiful, may realise the necessity of creating some such controlling authority.

Having given a brief account of the recent International Congress of Architects at Rome, which he had attended, Mr. Thornely continued: So far as I am concerned I have never viewed in so short a time such a glorious array of architectural masterpieces as I saw at Rome. . . . In the cursory examination one was able to make, what struck one most about all these buildings was their immense scale and largeness of conception, and the lavishment with which the interiors of the churches were decorated. To one accustomed to the sparing use of sculpture and painted decoration in our English Renaissance buildings such sumptuousness is at first sight overpowering, but it is surprising how soon one enters into the spirit of it, until at last one feels a sense of incompleteness in the internal finish of our English buildings. The facility with which the artists made use of the human figure both in painting and sculpture, adapting it in the most perfect manner to each and every position, cannot fail to strike any architect when making his first acquaintance with the masterpieces of the fifteenth and sixteenth centuries. . . . I have spoken of the costly marbles with which many of these churches are embellished, but in Italy, more than in any other country that I have visited, things are not always what they seem. It constantly happens that upon entering a church you are amazed at the

richness of the marbles employed in its construction, only to find on making a closer inspection that this apparently beautiful material is nothing better than paint. The deception is so well executed that it is necessary actually to feel the surface before one can decide whether it is real or imitation. What is more, Italians seem to have no limit to their ability in this direction, and much of their architecture becomes closely allied to scene-painting. Even the rustications and quoins of many of their old palaces are nothing else than a backing of brickwork covered with stucco, but so cleverly done as to deceive any but the closest observer. Palladio himself was one of the greatest sinners in this respect, for most of the noble stone palaces at Vicenza are nothing but a backing of brickwork covered with an inch or so of stucco. All over Italy this feature is so prevalent that one begins to wonder whether *we* are not altogether too truthful, but perhaps we prefer the straight and narrow path for the simple reason that we cannot tell a lie without immediate conviction.

Until my recent visit to Rome I had formed the idea, without giving much consideration to it, that modern architecture in Italy was at a rather low ebb. I cannot say that I should have much reason for changing that opinion if it were not that I had seen, and examined with considerable interest, the magnificent monument to Victor Emmanuel II. which is now nearing completion. Built on the slope of a hill and forming one end to a large piazza it rises up tier after tier to a huge colonnade in front of a screen wall along the full extent of its width. Centrally placed is the colossal equestrian statue of Victor Emmanuel executed in gilded bronze. The general structure is of a brilliantly white Botticino limestone, very like Carrara marble, which glistens in the sun and gives a wonderfully interesting effect of light and shade in varying lights. If I were to criticise it I might say it is almost on too large a scale, even for Rome, a city in which big things abound, but, be that as it may, the whole conception, so full of imagination, so cleverly conceived to meet the exigencies of the site, and so beautiful in all its detail and workmanship, cannot fail to compel one's admiration. What a contrast it forms to the Courts of Justice recently erected in Rome, a work of equal magnitude, but which, vulgar and coarse in all its proportions, lacks every quality that makes for fine architecture!

In conclusion let me give you a passage from Zola's *Rome*, which so aptly describes the spirit which has pervaded the city throughout the ages—alas that we should have not even the shadow of it here!—he says: "All of them possessed alike this passion for building, which seems to belong to the soil of their Empire, which reappeared in each of them with growing intensity, filling them with the desire to go farther, to surpass their predecessors with walls yet stronger and higher, with yet more marvellous piles of marble, more splendid columns and statues. And this thought was the same in all, of carrying forward their life, of leaving to the astonished generations that were to come the witness of their greatness, of perpetuating themselves in marvels which should never perish, but should still weigh upon the world with the force of Colossi, even when their own ashes had been scattered to the winds."

Leeds and Yorkshire Architectural Society.—A General Meeting of this Society was held on Thursday

evening, 14th December, at the Leeds Institute, the President, Mr. Sydney D. Kitson [F.] in the Chair. Mr. A. E. Dixon [F.], of Birmingham, read an interesting paper on the "Early Roman Churches" to a number of Members and Associates. The lecture dealt with the Early Christian Churches of between the third and ninth centuries, also mentioning the chapels, tombs, and catacombs. In dealing with the various features of these buildings the mosaics commanded special attention, being illustrated by a number of excellent slides, showing the decorations to the apses of many churches. A remarkable feature in the subjects of these mosaics is their peaceful seriousness, humour and scenes of judgment or retribution being entirely absent. In contrast to this, a number of slides were shown illustrating grotesque capitals from the neighbourhood of Poitiers, where in all cases grim humour was the predominating subject.

**Glasgow Institute of Architects.**—A quarterly general meeting of this Institute was held on the 13th December—Mr. John B. Wilson [F.], President, in the chair. The Secretary submitted a report on matters which had been dealt with by the Council since the last meeting. Representations had been made for amendment of the conditions of two competitions, and in one of these the Council had been successful in arranging for a fully qualified assessor being appointed. A proposal that a town planning exhibition be held in Glasgow had been received with satisfaction, and the Council hoped that arrangements would be made to hold such an exhibition in the city. It was reported that the Council had fully considered the amendments on the proposed new articles of association suggested at the extraordinary general meeting of the Institute held recently, and an informal discussion took place on the alterations proposed by the Council. It was reported that the proposals would be brought before the Institute at an early date for approval. The Secretary reported that intimation had been received from the R.I.B.A. that it was absolutely necessary that all applications for election to the class of Licentiates should be in the hands of the Secretary of the Royal Institute by April 30, 1912, at latest.

#### MINUTES. IV.

At the Fourth General Meeting (Ordinary) of the Session 1911-12, held Monday, 18th December 1911, at 8 p.m.—Present: Mr. Leonard Stokes, *President*, in the Chair; 30 Fellows (including 13 members of the Council), 44 Associates (including 2 members of the Council), 13 Licentiates, and several visitors—the Minutes of the Meeting held 4th December 1911, having been printed in the *JOURNAL*, were taken as read and signed as correct.

Mr. E. Guy Dawber, *Vice-President*, in the absence of the Hon. Secretary, having announced the decease of James Rawson Carroll, of Dublin, elected Fellow 1876, resigned 1908; George Gordon Hoskins, of Darlington, elected Associate 1867, Fellow 1870; and Pierre Jérôme Honoré Daumet, of Paris, Hon. Corr. Member elected 1886, Royal Gold Medallist 1908, it was resolved that the regrets of the Institute be entered on the Minutes of the Meeting and that messages of the Institute's sympathy and condolence for the loss they had sustained

be conveyed to Madame Daumet and to the nearest relatives of the other deceased gentlemen.

The following Members and Licentiates attending for the first time since their election were formally admitted by the President—viz. Robert Douglas Wells, *Fellow*; Charles Malcolm Swannell, Samuel Arthur Speare Yeo, Maurice Spencer Rowe Adams, *Associates*; and John Bruce Merson, Percy Walter Reed, William Harold Williams, and Joseph Vermont, *Licentiates*.

The Secretary having formally presented lists of the names of candidates who had passed the recent Preliminary, Intermediate, Final and Special Examinations, the Meeting agreed that the names should be taken as read, and the lists were laid upon the table for inspection after the Meeting.

The Secretary announced the names of candidates nominated for Membership—viz. as **FELLOWS**: Francis Winton Newman [A. 1904, Ashpitel Prizeman 1903, Arthur Cates Prizeman 1905] and Walter Tapper [A. 1889]; as **HON. CORR. MEMBER**, Victor Alexandre Frédéric Laloux, Membre de l'Institut de France, Commandeur de la Légion d'Honneur.

The Secretary further announced the nomination to Licentiatehip of the 41 candidates whose names were published in the Supplement for 21st October—viz.: Peter Frederick Binnie; George Francis Blackburne-Daniell, Cairo; William Alfred De Laistre Broadley; Charles Henry Brooke, Leeds; Henry Troughton Candler; Frank Sizer Capon; Arthur Gerald Crimp; Norman Elliot, Trafalgar House, N.; Vincent J. Esch, Calcutta, India; Frank Leonard Hodgson Fleming, Johannesburg; Edgar George Fletcher, Stockton-on-Tees; Henry Ernest Flinn, Birkenhead; William Henry Ford, Frankfurt, O.F.S., South Africa; Percy Norman Ginhams; Charles Thomas Good, Adelaide, Australia; Samuel Grundy, Junr., Ulverston; George Alfred James Hart, Christchurch, New Zealand; William Hynam; Thomas Gordon Jackson; Thomas McCosh Johnson, Cardiff; Melville Charles Marion Leggett, Nairobi, British East Africa; Edward Meek, Wellington, New Zealand; George Reginald Oddy, Halifax; Ernest Hadden Parkes; Neville Bond Pearce, Alberta, Canada; William John Player; Alexander Robertson, Kalgoolie, West Australia; Pieter Rodeck, Cairo; Arthur Arnold Sebley; Charles Evelyn Simmons; Cyril Hugh Slatter; Granville Edward Stewart Streatfeild; Henry Makins Tait, Kimberley; Joseph James Taylor, Darlington; William Thomas Topott, Leicester; Edward Arthur Verger, Winchester; Ernest John Wallis; Henry B. Watson, Vancouver, B.C.; David Webster, Saskatoon, Sask.; Sidney Wallace Whitmore, Pretoria, Transvaal; George Wittet, Bombay, India.

Papers, arranged for by the Practice Standing Committee, on the **NEWER RESPONSIBILITIES OF ARCHITECTS**, were read by Messrs. W. Henry White [F.] and Edward Greenop [F.], and the subject was discussed by Messrs. A. M. Brice and G. R. Blanco White, Barristers-at-law.

On the motion of the President the discussion was then adjourned, the President stating that the Papers read that evening would be printed in the *JOURNAL*, and that at the adjourned Meeting two other Papers which had been prepared by Messrs. Wm. Woodward [F.] and A. Saxon Snell [F.] would be read, and the discussion to follow would cover the ground of all four Papers.

The President announced that a Special General Meeting would be held, following the Business Meeting of the 8th January 1912, to discuss proposals of the utmost importance with respect to the Society of Architects, particulars of which were about to be sent to all members.

The proceedings closed and the Meeting separated at 9.55 p.m.

